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Command and Staff College  
Marine Corps University  
2076 South Street  
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Quantico, Virginia 22134-5068*

# ***MASTER OF MILITARY STUDIES***

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**“CUTTING THE STOVEPIPES: An Improved Staff Model for  
the Modern Unified Commander”**

**SUBMITTED IN PARTIAL FULFILLMENT  
OF THE REQUIREMENTS FOR THE DEGREE OF  
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United States Marine Corps**

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## EXECUTIVE SUMMARY

**Title:** CUTTING THE STOVEPIPIES: An Improved Staff Model for the Modern Unified Commander

**Author:** Major Eric M. Mellinger, United States Marine Corps

**Thesis:** The staff structure of the American unified commands must be reengineered in order to create an organization that is more adaptive, collaborative, self-synchronizing, responsive, and agile.

**Discussion:** The modern operational level of war is characterized by a robust array of responsibilities which range from pure military planning / operations to actions which border on ‘proconsular’ duties. Generally, today’s American operational level military staffs are those of the unified commands (Commander’s in Chief - CINCs) or sub-unified commands (such as Joint Task Forces - JTFs). These staffs are often ill equipped structurally to achieve tempo dominance in the modern information age of compressed information / decision cycles.

The Napoleonic era of military development established the pattern for the distribution of staff duties. French organizational innovations inspired later staff transformation in the Prussian army, and many principles can still be seen in American staff organization and functions. The 4-Sectional staff (i.e., J-1: Administration; J-2: Intelligence; J-3: Operations; J-4: Supply / Logistics), which was formally institutionalized during the 1<sup>st</sup> World War, is the mainstay of the modern American military culture. This structural format is based on hierarchical, industrial age organizational precepts that have lost a great deal of relevance in today’s military environment.

The corporate sector has changed its organizational paradigm to flatten hierarchical structure in order to speed business processes. They have concluded that the most potent organizations are those that are adaptive, share information, collaborate across domains, have wide spans of control, and employ self-synchronizing teams. Although not all civilian initiatives are directly applicable to the military setting, U.S. Special Operations Command has demonstrated that many innovative business processes can be applied to the military environment. This command has shown that the “J” structured organization does not have to be the default for American operational staffs.

**Conclusion(s) or Recommendation(s):** Current American military staff structure, employed at the operational level of war, does not support the commander in the most efficient manner. Modern unified commands should adopt a more horizontal staff organization (potentially based on a circular model) that is adaptive, collaborative, self-synchronizing, responsive, and agile.

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# Chapter 1

## Introduction

*'If it ain't broke, don't fix it' needs revision. I propose: 'If it ain't broke, you just haven't looked hard enough.'*<sup>1</sup>

- Tom Peters in *Thriving on Chaos*

*Napoleon could reappear today and recognize my Central Command staff organization: J-1, administrative stovepipe; J-2, intelligence stovepipe--- you get the idea. The antiquated organization is at odds with what everyone else in the world is doing; flattening organization structure, decentralizing operations, and creating more direct communications. Our staff organization must be fixed.*<sup>2</sup>

- General A.C. Zinni, USMC (Ret.), Former CINC USCENTCOM

Command and control (often simply referred to as C<sup>2</sup>) is one of the most important components of any effective military organization. Marine Corps Doctrinal Publication (MCDP) 6 puts it succinctly, “No single activity in war is more important than command and control . . . In short, command and control is essential to all military operations and activities.”<sup>3</sup> Command is embodied in the authority and position of the “Commander.” Conversely, control is often manifested in the functions of the military staff. “Control is a more precise means through which staffs support their commander’s

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<sup>1</sup> Thomas J. Peters, *Thriving On Chaos* (New York: Random House, 1987), 3.

<sup>2</sup> General Anthony C. Zinni, USMC (Ret.), “A Commander Reflects,” *U.S. Naval Institute Proceedings*, July 2000, 36.

<sup>3</sup> Marine Corps Doctrinal Publication (MCDP) 6, *Command and Control* (Washington, DC: Department of the Navy, 4 October 1996), 35.

intent and work with other staffs. Control . . . is primarily the staff's business.'<sup>4</sup> Military staffs' responsibilities have grown exponentially since the end of the Second World War. What was straightforwardly described as C<sup>2</sup> only a few decades ago, now must include elements of "communications," "computers," "intelligence," and most recently "integration" (thus becoming C<sup>4</sup>I<sup>2</sup>)<sup>5</sup>. Although the complexity of the modern military environment continues to increase, the staff structure that operates in such burgeoning diversity has remained fundamentally the same for the last 200 years.

There are three levels of war that military staffs operate within: strategic, operational, and tactical. The strategic level of war "involves the art and science of employing armed forces with the other instruments of national power to secure strategic goals."<sup>6</sup> This is the highest level of war. At the tactical level, "battles and engagements are planned and executed to accomplish military objectives [and are] assigned to tactical units or task forces."<sup>6</sup> This is considered the lowest echelon of military actions. The operational level of war is the critical link between the strategic and the tactical levels. At the operational level, "joint and combined operational forces within a theater of operations perform subordinate campaigns and major operations to accomplish the strategic objectives of the unified commander or higher military authority."<sup>6</sup> The modern operational level of war is characterized by a robust array of responsibilities which range from pure military planning / operations to actions which border on "proconsular" duties. As noted by recently retired U.S. Marine General A.C. Zinni, "The operational level is

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<sup>4</sup> LTG Wilson A. Schoffner, USA cited in David S. Alberts and Richard E. Hayes, *Command Arrangements for Peace Operations* (Washington, DC: National Defense University Press, 1995), 9.

<sup>5</sup> The U.S. military's recent command and control acronym that is in fashion is C4ISR (Command, Control, Communications, Computers, Intelligence, Surveillance, Reconnaissance).

<sup>6</sup> U.S. Marine Corps Command & Staff Operational Level of War Syllabus, Academic Year 2000-2001, 10.

the key . . . it has levels below [tactical] and above [strategic] . . . it must think broader in space and time . . . it is much more complex and rich.”<sup>7</sup> Generally, today’s American operational level military staffs are those of the unified commands (Commander’s in Chief - CINCs) or sub-unified commands (such as Joint Task Forces - JTFs).<sup>8</sup>

The current staff structure, used by U.S. unified and sub-unified commanders, is oriented around the “J” designated functional areas of responsibility (e.g., J-1: Administration, J-2: Intelligence, etc.). This hierarchical model is extremely “stove piped” (i.e., canalized and dislocated flow of knowledge / ideas) and does not facilitate expedient processing of information or decisions. One consequence of this structure is that it hinders efficient decision cycles because lower level staff members are not empowered to achieve rapid completion of important functions. For the United States to maintain full spectrum dominance in future conflicts, American operational tempo (and the resultant initiative advantage) must be decidedly superior to any potential adversary. The modern unified commands’ staff structure often inhibits the generation of tempo because it is not “structured in a way to be conducive to rapid, effective, relevant decision making.”<sup>9</sup> This suggests that the staff model, currently used at the operational level of war, has become outdated in the modern information age of compressed decision / action cycles.

The staff structure of the American unified commands must be reengineered in order to create an organization that is more adaptive, collaborative, self-synchronizing,

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<sup>7</sup> General Anthony C. Zinni, USMC (Ret.), CINC CENTCOM from 1997-2000, interview by author, 12 October 2000.

<sup>8</sup> No specific level of staff operates solely at the “Operational Level of War” or has a monopoly on conducting “Operational Art.” General Zinni observed during his interview that, “[the Army] Corps, MEF, Numbered Fleet, Numbered Air Force [all] touch on the operational level.” However, the American unified commands provide a perfect model of modern staffs that must execute their responsibilities primarily at this level of war. Today’s CINCs often are involved in issues which transcend the strategic / operational boundary. They are the modern American version of the classical “General Staff.”

<sup>9</sup> Zinni interview.



responsive, and agile. This paper will examine this critical need through review of the historical origins of modern military staffs, discussion of current CINC staff organization, analysis of emergent organizational concepts being developed in both the civilian and military sectors, conduct of a case study of one unified command (USSOCOM) that recently transformed its staff, and presentation of a possible alternative format for current military staff structure.

If the U.S. Department of Defense (DoD) aspires to harness and ride the meteor of future warfighting concepts such as “Network Centric Warfare” and “Effects Based Warfare,”<sup>10</sup> it will be required to update the command and control architecture as it currently exists in the staff structure of the U.S. unified commands. This possible reorganization could draw its charter from the guidance verbalized in former Secretary of Defense William S. Cohen’s 1997 *DEFENSE REFORM INITIATIVE REPORT*, “. . . all headquarters structures should be thinned, flattened and streamlined . . .”<sup>11</sup>

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<sup>10</sup> See Alberts, Garstka, and Stein, *Network Centric Warfare: Developing and Leveraging Information Superiority* and Smith, “Network Centric Warfare: Where’s the Beef?”

<sup>11</sup> William S. Cohen, *DEFENSE REFORM INITIATIVE REPORT*-November 1997. URL: <<http://www.defenselink.mil/pubs/dodreform/>>, accessed 2 January 2001.

## Chapter 2

### HISTORY OF MILITARY STAFF ORGANIZATION

*When some unknown warrior chief asked for help or advice from one of his co-belligerents, military history saw the first functioning of the military staff.<sup>1</sup>*

*There can be little doubt that the Napoleonic era provided the culture in which the germ of staff theory and technique burgeoned into one of its most important developments . . . and proved by positive as well as negative examples that staff knowledge was indispensable to the successful conduct of war.<sup>2</sup>*

- From Hittle's *The Military Staff*

#### Overview

Staffs have existed since the time leaders began to require aid in the conduct of their duties. As noted by Hittle:

By considering the many duties performed by the commander's assistants, we may understand why these assistants eventually become known as the 'staff,' an organization representing something the leader had to 'lean on' in the exercise of his duties of command.<sup>3</sup>

Military staffs have taken many forms over the years. However, the basic functions of a military staff have remained the same even when the structure has changed. These functions have included: obtaining information for the commander, preparing operational plans, translating the commander's decisions / plan into orders, transmitting orders to subordinate units, bringing important issues to the commander's attention, conducting

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<sup>1</sup> James D. Hittle, *The Military Staff* (Westport, CT: Greenwood Press, 1975), 1.

<sup>2</sup> Hittle, 86.

<sup>3</sup> Hittle, 3.

estimates of current situations, making plans for future action, and supervising the execution of plans in order to carry out the commander's intent.<sup>4</sup>

Traditionally, the size and shape of staffs have been a function of the complexity of the military operations being conducted. When armies were small and maneuvered as single formations, there was little need for large, specialized staffs. As military organizations grew, both in physical size and in sophistication, their headquarters staffs enlarged proportionately. The single precipitating factor in the development of dedicated military staffs seemed to be the logistical realities of maintaining a standing army for a prolonged period of time. Martin Van Creveld noted this factor as, “. . . the principal problem facing [military commanders] for the greatest part of a campaign was not how to fight the enemy but how to exist in the field. It was in order to deal with this problem that staffs and staff work were first invented.”<sup>5</sup> Therefore the most important staff position, and one of the first to formally come into existence, was that of the Quartermaster.<sup>6</sup> The Quartermaster initially had responsibilities that far transcended the modern supply function (in some periods he had both intelligence and operations duties).

Today there are generally three levels of military staffs. They are described as: “National-Level Staffs,” “Departmental / Service Staffs,” and “Field Staffs.”<sup>7</sup> The highest level has been referred to as a General Staff. This is an organization that has cognizance over all aspects of a military establishment. Historical examples of General Staffs are the 19<sup>th</sup> Century Prussian General Staff, the German Oberkommando (O.K.W.) staff of World War II, and the modern U.S. CINC staff.

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<sup>4</sup> Described by Hittle.

<sup>5</sup> Martin L. Van Creveld, *Command in War* (Cambridge, MA: Harvard University Press, 1985), 27.

Military staff development can be traced back to Ancient Egypt (approximately 2000 B.C.). However, military organization began to be dramatically redefined during the 17<sup>th</sup> Century. To grasp current staff structure, the circuitous path of relatively recent structural improvements must be explored. Hittle characterized this frequently unpremeditated organizational evolution as, “The development of the staff system is essentially the story of how, through custom and necessity, certain specific duties gradually were assigned to . . . officers who were part of the headquarters personnel of the commander.”<sup>8</sup>

## **EUROPEAN STAFF INITIATIVES: The Ascendancy of the Napoleonic Staff**

### **Sweden**

The historical rise of national armies was testament to the leadership and skills of the Swedish king Gustavus Adolphus. His development of methodical military procedures (scientific in nature), in the 17<sup>th</sup> Century, revolutionized warfare and ushered in the modern era of military affairs. He refined the existing staff structures and made them more specialized--especially in the areas of supply and intelligence. He provided for dedicated staffs to support each functional responsibility of the headquarters. Gustavus Adolphus would exert an influence on military thought for hundreds of years. “From the standpoint of the evolution of the modern staff system, the historical evidence strongly supports the contention that all European staffs stemmed from the system of Gustavus.”<sup>9</sup> Hittle also observed that Adolphus’ widely accepted staff improvements is a

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<sup>6</sup> Caesar (100-44 B.C.) first originated the concept of a “Quartermaster” (known in Latin as “Quaestors”). This billet would later become an important component of most future military staff structures. From Hittle, 28.

<sup>7</sup> Discussed in depth by Hittle.

<sup>8</sup> Hittle, 11.

<sup>9</sup> Hittle, 45.

reason why “certain features of staff organizations are common to all military organizations, even to this day.”<sup>10</sup>

### **Prussia / Germany**

Modern Germanic development of staff doctrine fully subscribed to the philosophy that a nation must, “first develop the staff and then the army which the staff has to control.”<sup>11</sup> Another fundamental principle in the Prussian / German military ethos was the highest import placed on professional education and schooling of officers (especially those who would assigned to military staffs). Frederick the Great began a military school in 1765 which would be the precursor to Scharnhorst’s famed Kriegsakademie. The traditional Germanic emphasis on the Quartermaster became the centerpiece of the Prussian staff.

After their catastrophic defeat by Napoleon at Jena, the greatest Prussian thinkers of the era (Stein, Scharnhorst, Gneisenau, and Clausewitz) began to examine how France had organized to defeat their army. The product of their intellectual labors became the widely regarded “Great General Staff.” “The Prussian staff system in 1828 possessed all of the essential elements of a modern staff system.”<sup>12</sup> This staff saw the creation of a modern “Chief of Staff” in order to supervise all staff functions. A structural weakness, however, was the utmost importance put on the operational planners and the subordination of the intelligence / administrative sections of the staff.

Moltke (the Elder) would continue German staff innovation through the end of the 19<sup>th</sup> Century. Von Schlieffen would succeed him in elevating the members of the

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<sup>10</sup> Hittle, 46.

<sup>11</sup> Hittle, 51.

<sup>12</sup> Hittle, 70.

German General Staff to the highest level of authority during World War I. Von Seeckt effectively continued staff development (reinstating professional military academies) during the inter-war period, but the General Staff was doomed to be subjugated by the strategic vision of Adolph Hitler during WW II.

## **France**

France was the dominant laboratory for staff development early in the modern era. Pierre de Bourcett (1700-1780) became a key figure in France's military development. Besides being a leading proponent for military education and intellectual development, de Bourcett can be credited for developing the staff "estimate of the situation." In 1766, he developed the format for the French General Staff that would be the model for later Prussian developments. It was said that he was, "the greatest staff officer of the French Army of the 18<sup>th</sup> Century."<sup>13</sup>

Napoleon Bonaparte rode the tide of the French Revolution into command of France's Army. Although it may be said that Napoleon did nothing revolutionary to French Staff structure, nor did his genius require the assistance of a complete staff, he did cause "the basic French doctrine [to be] readjusted, amplified, and utilized."<sup>14</sup> The true author of Napoleon's staff structure was his chief of staff in the Army of Italy, Pierre Alexandre Berthier. He elevated the position of Chief of Staff and subordinated four adjutant generals under him for distribution of staff functions. Although the actual staff responsibilities would be different than today's "four sectional staffs,"<sup>15</sup> Berthier did set the

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<sup>13</sup> Hittle, 93.

<sup>14</sup> Hittle, 94.

<sup>15</sup> The modern military staff format is based around 4 functional areas: 1 – Administration; 2 – Intelligence; 3 – Operations; 4 – Supply / Logistics.

pattern for dividing staff duties. Most importantly he understood the strict requirement for staffs not to inhibit tempo. His 1796 directive stressed, “Speed is the most important thing in general staff work.”<sup>16</sup>

Paul Theibault, an adjutant general in the French army, formalized Berthier’s developments in a seminal work entitled, *Manuel des Adjutants Generaux et des Adjointes Employes dans les États-Majors Divisionnaires des Armées*.<sup>17</sup> This manual would inspire later staff transformation in the Prussian army and its principles can still be seen in our modern staff organization and functions.

General Antoine Henri Jomini, Marshal Ney’s Chief of Staff, would take the staff principles espoused in Theibault’s work and integrate them to refine his own staff. Jomini’s later departure from French service (to serve in and shape Russia’s military) allowed him to spread the French staff theories via his classic military literary works.

Hittle comments on the pervasive impact of Napoleonic staff developments on our modern militaries. He states, “It is possible to find in the staff systems of the French armies during the Napoleonic era practically all the organizational and functional features of modern French and United States staff technique.”<sup>18</sup> However, Hittle also identifies some telltale characteristics of the French staff which may be cause for concern in our current staff model. “The French staffs possessed most of the requirements of a modern staff system, **canalization of effort**, delegation of authority, and **supervisory power** [emphasis added].”<sup>23</sup>

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<sup>16</sup> Hittle, 97.

<sup>17</sup> Hittle, 98.

<sup>18</sup> Hittle, 114.

## **AMERICAN STAFF HISTORY: Adopted European Structure**

American military staff development followed the same shaky route as the development of her nation. George Washington modeled the staff of the Continental Army from his experience as a British staff officer (especially his time under British General Braddock). Washington's army was too diverse in its leadership (many Continental Generals came from different ethnic backgrounds) to easily institute a coherent staff structure. It took the arrival of Baron Frederick von Steuben, as Washington's Inspector General, to improve the army's readiness and staff efficiency. Von Steuben was "a product of the staff system of Frederick the Great . . ."<sup>19</sup> He was a capable staff officer who produced invaluable "estimates of the situation" for Washington. He instituted a robust Quartermaster staff that would begin to provide sufficient logistical support for the burgeoning army. Von Steuben fully understood that the staff's role was to free the commander to concentrate on bigger issues.

The impact of Von Steuben would be felt for many years after the Revolutionary War. Not much changed in the American military staff until the time of the Civil War. Although a military commission traveled to Europe to observe military developments at the time of the Crimean War, no notice was taken of the Prussian or French advances in military staff structure. Ironically, General George B. McClellan (who had been a member of the overseas commission) would be the Union general who identified the weaknesses in the staff structure of the Army of the Potomac, and set about to correct them. His staff reorganization, most notably the rise in importance of the Chief of Staff, would be a lasting legacy in the modern American Army. Unfortunately, American

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<sup>19</sup> Hittle, 174.



Western expansion, after the Civil War, would stifle military staff development as most conflicts took on the nature of small skirmishes with American Indian tribes. American staff improvements quickly lagged behind the progress achieved by the European powers.

In 1870, Brigadier General Thomas M. Vincent, Assistant U.S. Adjutant General, wrote a pamphlet entitled, *A Plea for the Staff of the Army of the United States*.<sup>20</sup> This document relied heavily on the writings of Jomini and signaled the beginning of the American military's subscription to French military thought. Vincent's document did not, however, precipitate any distinctive shifts in staff structure.

Not until the near disastrous staff failures of the Spanish-American War, in 1898, was there a concerted effort to rectify American military staff weaknesses. Elihu Root became Secretary of War, in 1899, and applied himself to overhauling the American military landscape. He put emphasis on professional development of military officers. He established the Army War College (1900) and the General Service and Staff College (1901) in order to develop military staff members. In 1903, Root championed legislation to change the title of the Commanding General of the Army into the Army Chief of Staff. It also assigned him a staff of 44 officers—thus the American military finally had a General Staff.<sup>21</sup>

World War I would see the American staff structure updated to enable the American Expeditionary Force (A.E.F.) to integrate with their Allies (especially the French). Root would employ the staff concepts presented in Spenser Wilkinson's (a British military architect) work, *The Brain of the Army*, in his efforts to update the U.S. military's command organization. The A.E.F. would examine the British and French

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<sup>20</sup> Hittle, 195.

<sup>21</sup> Hittle, 203.

staff models and create a general staff with 5 Sections: G1 – Administration (some equipping duties), G-2 – Intelligence, G-3 – Employment of Troops / Strategic Studies, G-4 – Supply, and G-5 – Instruction / Training. By the end of the war, the American military staff closely resembled those of the Western European powers. In 1921, the 4-Sectional staff (i.e. G-1, G-2, G-3, G-4) was finally established as the standard format. This structure would carry the United States through World War II. Hittle concisely summarized this period of American military staff development as:

The system that finally emerged in World War I was a product of many factors. It retained much of the original British staff nomenclature that had basic features of French staff doctrine which had received inspiration from such great staff officers as Berthier, Thiebault, and Jomini of the Napoleonic era. The intellectual attributes of the system as well as the basic concept were largely Prussian in origin, having been transfused into our staff thought through the writings of Spenser Wilkinson, . . . and the efforts of Elihu Root.<sup>22</sup>

The American military would enact major structural changes after World War II in order to deal with the realities of being a “Super Power” in the new Atomic Age. The National Security Acts of 1947 and 1949 would establish and organize a new Department of Defense (DoD). This structure would provide for a Joint Chiefs of Staff (JCS) headquarters and establish staffs for the services as well as for the Chairman of the JCS. The 4-Sectional staff was now institutionalized as a mainstay of the modern American military culture.

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<sup>22</sup> Hittle, 214.

## Chapter 3

### THE MODERN CINC STAFF: The Hierarchical “J” Structure

*In a crisis, the dusty wire diagram sitting atop most of our desks does not spring into action as one amorphous mass.<sup>1</sup>*

- From “Scrapping the Napoleonic Staff Model”

*We are too layered, we are too stove piped, too functionally oriented. Some of those functions may not be right . . . the “1” “2” “3” [and] “4” may not be right.<sup>2</sup>*

- General A.C. Zinni, USMC (Ret.), Former CINC USCENTCOM

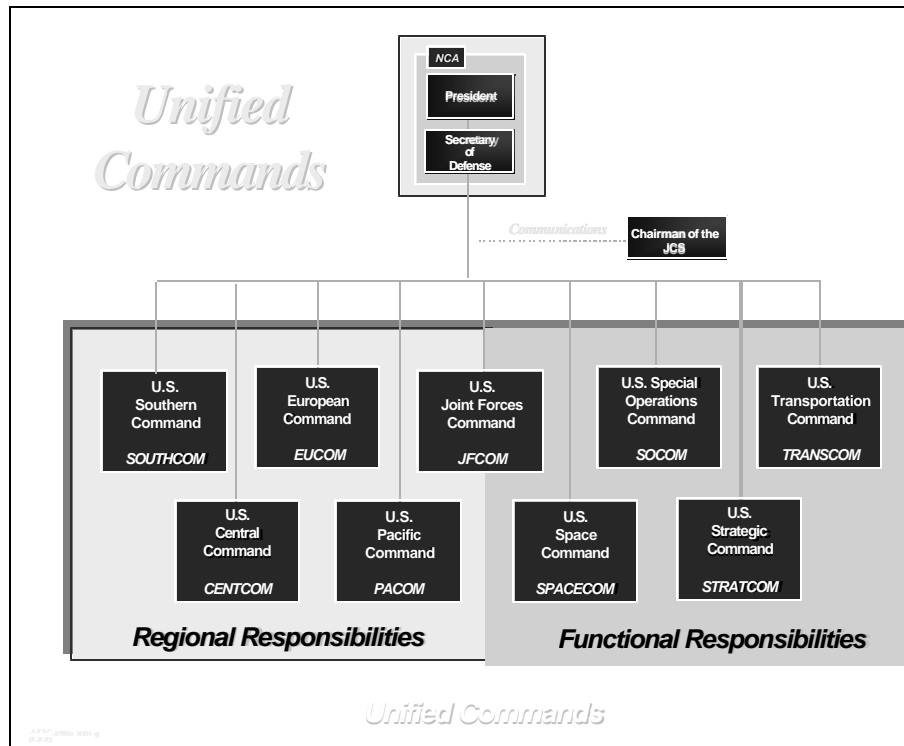
### CINC Overview

The 1986 Goldwater-Nichols DoD Reorganization Act solidified the concept of jointness in the American military’s “way of war.” Among the many implications of the Act, the rise in status of the Unified Commanders (or CINCs) transformed them into DoD’s primary “warfighters.” There are currently nine United States Unified Commands (see Figure 2.0). Some commands have geographic responsibilities, while others are functionally oriented. They also have the ability to establish subordinate unified commands and Joint Task Forces (JTFs). These commands require dynamic staffs that must manage a myriad of complex actions and functions for their respective CINCs.

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<sup>1</sup> BGen Anthony C. Zinni, USMC, COL Jack W. Ellertson, USA, and Maj Bob Allardice, USAF, “Scrapping the Napoleonic Staff Model” *Military Review*, July 1992, 84.

<sup>2</sup> General Anthony C. Zinni, USMC (Ret.), CINCCENTCOM from 1997-2000, interview by author, 12 October 2000.



**Figure 2.0<sup>3</sup>**

A CINC's staff is organized to provide him with a "Personal Staff," a "Special Staff," and a "Joint Staff Group." The Personal Staff works directly for the commander and performs duties as his personal advisory group. "The Special Staff is usually small, with experts found on the component command staffs or within the joint staff divisions."<sup>4</sup> The Joint Staff Group is organized into the modern expanded version of the "4-Section" general staff developed during the 20<sup>th</sup> Century. "The function of the joint staff is to execute the responsibilities of the commander."<sup>5</sup> A generic CINC staff structure can be seen in Figure 3.0. Members throughout the staff echelons are provided by all of the Services on an agreed upon number (and type) of billets.<sup>6</sup>

<sup>3</sup> *Joint Electronic Library*, CD-ROM (Washington, DC: U.S. Government Printing Office, 2000), accessed 20 December 2000.

<sup>4</sup> JFSC Pub 1, 1-48.

<sup>5</sup> JFSC Pub 1, 1-49.

<sup>6</sup> These billets are published in the "Joint Duty Assignment List" (JDAL). This publication is coordinated with all of the Service Departments through the Joint Staff in Washington, DC.

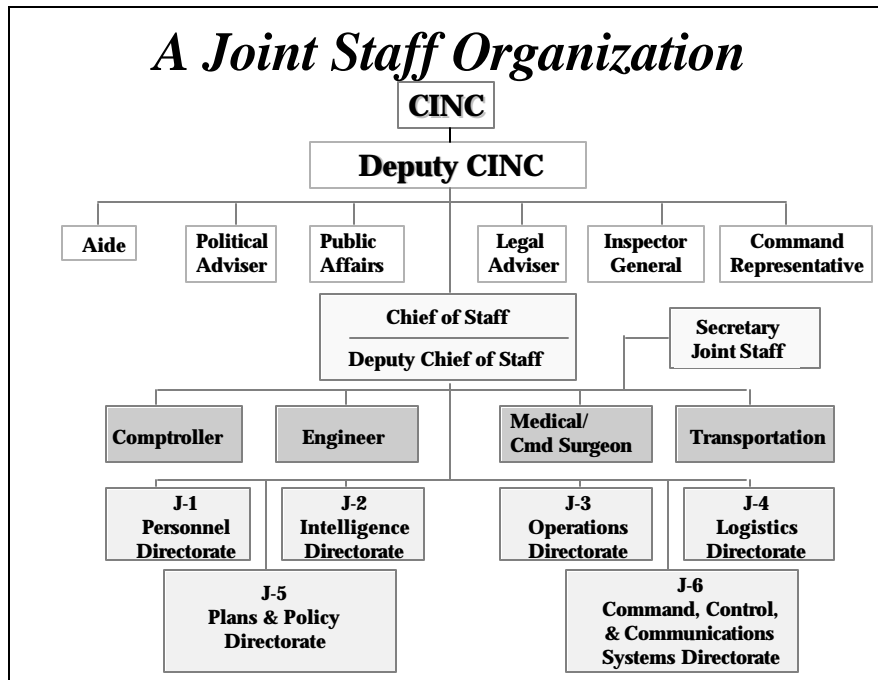


Figure 3.0<sup>7</sup>

The Deputy Commander-in-Chief (DCINC) performs the duties of the CINC during his frequent absences. The CINCs are often required to be away from their “main” headquarters because of the plethora of their military / political responsibilities. This is complicated, for the geographic CINCs, by the physical dislocation of the headquarters facilities in the United States from the actual areas of responsibility (AORs) throughout the world. The DCINC therefore runs the “day-to-day” operations of the headquarters.

The Chief of Staff, normally a general / flag officer, coordinates staff functions of the Special and Coordinating Staffs. He also carries out many of the Commander’s custodial duties (i.e., administrative and legal) in order to free the CINC / DCINC from the mundane details of running the headquarters. He is considered a “Principal Staff Officer” along with the Secretary, Joint Staff (who assists with administrative duties). In the past, the DCINC and Chief of Staff have been combined in some commands.

The “J” designated staff sections are built along functional lines (see Figure 3.1). They consist of smaller, subordinate sections that have cognizance over specialized aspects of the overall “J” responsibility. For example, under the J-3 – Operations, there is a separate staff cell for nuclear, biological, and chemical operations. The “J” sections are consistently expanding with more staff specialists in order to handle the increasing complexity of military operations (the J-6 is a good example of a section that has experienced significant growth due to the recent proliferation of information systems).

FUNCTIONS OF JOINT STAFF DIVISIONS	
DIRECTORATE OR DIVISION	RESPONSIBILITIES
<i>Manpower and Personnel (J-1)</i>	<ul style="list-style-type: none"> <li>• Manage manpower</li> <li>• Formulate personnel policies</li> <li>• Supervise administration of personnel, including civilians and prisoners of war</li> </ul>
<i>Intelligence (J-2)</i>	<ul style="list-style-type: none"> <li>• Ensure availability of sound intelligence on area and enemy locations, activities, and capabilities</li> <li>• Direct intelligence efforts on proper enemy items of interest</li> <li>• Ensure adequate intelligence coverage and response</li> <li>• Disclose enemy capabilities and intentions</li> </ul>
<i>Operations (J-3)</i>	<ul style="list-style-type: none"> <li>• Assist in direction and control of operations</li> <li>• Plan, coordinate, and integrate operations</li> </ul>
<i>Logistics (J-4)</i>	<ul style="list-style-type: none"> <li>• Formulate logistics plans</li> <li>• Coordinate and supervise supply, maintenance, repair, evacuation, transportation, construction, and related logistics matters</li> <li>• Ensure effective logistics support for all forces in the command</li> </ul>
<i>Plans and Policy (J-5)</i>	<ul style="list-style-type: none"> <li>• Assist commander in long-range or future planning</li> <li>• Prepare campaign and operation plans</li> <li>• Prepare estimates of the situation</li> <li>• Functions may be included in operations directorate</li> </ul>
<i>Command, Control, Communications, and Computers or Communications-Electronics and Automated Systems (J-6)</i>	<ul style="list-style-type: none"> <li>• Assist commander with responsibilities for communications-electronics and automated data systems</li> <li>• Prepare communications and data systems plans to support operational and strategic concepts</li> <li>• Furnish communications to exercise command in mission execution</li> <li>• Functions may be included in operations directorate or in the special staff</li> </ul>
<i>Special Staff</i>	<ul style="list-style-type: none"> <li>• Give technical, administrative, and tactical advice</li> <li>• Prepare parts of plans, estimates, and orders</li> <li>• Coordinate and supervise staff activities</li> <li>• Special staff may be included as branches of directorates</li> </ul>
<i>Personal Staff</i>	<ul style="list-style-type: none"> <li>• Responsible directly to the commander</li> <li>• Special matters over which the commander chooses to exercise close personal control</li> <li>• Usually includes the political adviser</li> </ul>

Figure 3.1<sup>8</sup>

Some of the CINCs have created additional sections (J-7 through J-9) to handle specific aspects of their command’s responsibility. Joint Forces Command possesses an

<sup>7</sup> Joint Electronic Library, CD-ROM (Washington, DC: U.S. Government Printing Office, 2000), accessed 20 December 2000.

<sup>8</sup> JFSC Pub 1, 1-51.

enlarged staff structure to accomplish its functional responsibilities (i.e., J-7: Joint Training; J-8: Strategy, Requirements, Integration; J-9: Joint Experimentation).

## **CINC Staff Structural Weaknesses**

### **Overview**

The staffs of the unified commands are the structural descendents of the staff formats started in European militaries during the 17<sup>th</sup> Century and refined in the United States throughout the last century. The modern military staff embodies the industrial age precepts of hierarchical, vertical flows of work and supervision. A recent Rand study describes the reason for this military format as, “Such an organization has been used because of its vertical flow of control, facilitating dissemination of orders from top to bottom and ensuring compliance from bottom to top in a rapid efficient manner.”<sup>9</sup> The “J” structure also embodies the timeless military traditions of accountability and reporting through rigid chains-of-command. These structural characteristics are counter-productive to the warfighting philosophy (i.e., maneuver warfare tenets like trust tactics, seizure of initiative, and tempo dominance) subscribed to by the modern military commands working at the operational level of war.

### **Information Flow & Lack of Collaboration**

Information is passed through fixed, vertical structural “pipes” in the CINC staffs. These reporting chains force information (and all subsequently distilled knowledge) to remain within the confines of each “J” section’s insulated compartment. Without a higher authority moving information horizontally from one section to another, much like someone taking a garment from one drawer in a chest and placing it into another, the sections will not

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<sup>9</sup> Arthur F. Huber and others, *The Virtual Combat Air Staff: The Promise of Information Technologies* (Santa Monica, CA: Rand Corporation, 7 August 1996), 2.

benefit from shared awareness. Although mechanistic techniques such as routing sheets are used during the staffing process, these efforts are not useful during time constrained periods. The lack of habitual collaboration across staff boundaries affects the rapidity of staff functions and increases overall staff decision cycles.

### **Lack of Flexibility**

Each CINC-dom does have a slightly different staff arrangement according to its geographic / functional responsibilities. The personality of the CINC also plays a part in organizational shape. However, the concept of flexible structure does not permeate the CINC staffs. As Hittle noted, “Such modifications of a tried and usually adequate staff doctrine must be kept in the status of exceptions, or the exceptions will eventually displace the standard system with no system at all.”<sup>10</sup> The CINC staffs are not energized to construct adaptive working groups that form for only short, transient periods of time and then disperse after their purpose has been accomplished. Functions are not easily transferred from staff section to staff section (or to components). This creates an unresponsive organizational structure during specific crisis situations.

### **Decreased Span of Control**

On average, there are four (many times five or six) echelons of headquarters structure between individual action officers<sup>11</sup> on the staff and the CINC himself.<sup>12</sup> This is a result of the military’s long held tendency to assume pyramidal formats in all their headquarters.

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<sup>10</sup> James D. Hittle, *The Military Staff* (Westport, CT: Greenwood Press, 1975), 221.

<sup>11</sup> By “action officer” (AO) I refer to any member of a CINC staff who is not a Section Head or Primary Staff Officer. Unified commands’ AOs are usually O-5’s or O-4’s who are qualified to be Joint Staff Officers.

<sup>12</sup> As an example, the USCENTCOM Joint Petroleum Officer (an O-5) manages the purchase / distribution of petroleum products for the geographical area of his CINC. His advice / recommendations must go through the J-4/7 Operations Officer (an O-6), then the J-4/7 Logistics Officer (an O-8), then the Chief-of –Staff (usually an O-8), then the DCINC (an O-9), and then it finally makes it to the CINC. There are 4 bureaucratic layers between the CINC and this action officer. Related by LtCol David G. Reist, USMC, Faculty, Marine Corps Command and Staff College, Quantico, VA, 11 January 2001.



Although this is an efficient way for the Commander to reduce the information that is reaching him, it also filters out many elements of knowledge which may be necessary for him to achieve situational awareness. It may also contaminate knowledge as it makes its way through each layer. The worst side effect is the loss of information timeliness. This causes an elongation of decision cycles, which can have a derogatory effect on operational tempo.

### **Lack of Empowerment at Lower Levels**

The current CINC structure does not empower action officers to make rapid decisions affecting the command's interests. Staff members are encouraged to conduct "thorough staff action" which equates to routing all issues / decisions through the command's structural labyrinth before they are presented to the CINC. Action Officers are not liberally encouraged (without specific permission) to coordinate outside of their section or with other commands. The overall result is an array of cumbersome processes with little opportunity for quick closure on issues.

## **Conclusion**

The staff structure currently used on the CINC staffs is not conducive to generating tempo at the operational level of war. The traditional vertical processes are ineffective and do not provide the unified commander with the situational awareness required to gain and maintain initiative. This characteristic also does not establish the environment to exploit current (and future) advances in information and C<sup>2</sup> tools. As cited in a recent Rand study:

The hierarchical military organization has proven to be an adequate construct for waging industrial-age warfare against a similarly organized opponent, even though there are inherent limitations to this organization. Two of those limitations include poor information transfer mechanisms and the inflexibility to take the maximum advantage of newer technologies.<sup>13</sup>

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<sup>13</sup> Huber and others, 2.

## Chapter 4

### **ORGANIZATIONAL IMPROVEMENTS: How the Business World Has Adapted**

*Radical, nonlinear innovation is the only way to escape the ruthless hyper-competition that has been hammering down margins in industry after industry. Nonlinear innovation requires a company to escape the shackles of precedent and imagine entirely novel solutions to customer needs.<sup>1</sup>*

- Gary Hamel in *Leading the Revolution*

*In moving from the traditional authoritarian, hierarchical organization to a locally controlled organization, the single greatest issue is control.<sup>2</sup>*

- Robert Swiggett, Retired CEO of the Kollmorgen Corporation

### **Introduction**

Businesses operate in a highly competitive environment that will quickly eliminate any organization which does not quickly adapt to the changing nature of the world market. Peter Senge noted, “Few large corporations live even half as long as a person.”<sup>3</sup> In the last two decades, many businesses (especially those in America) have been forced to critically examine and adjust their organizational structure to recapture lost profit margins. Business concepts derived from the industrial revolution are now being made obsolete by the information revolution.

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<sup>1</sup> Gary Hamel, *Leading the Revolution* (Boston, MA: Harvard Business School Press, 2000), 13.

<sup>2</sup> Peter M. Senge, *The Fifth Discipline* (New York: Doubleday, 1990), 290.

<sup>3</sup> Senge, 17. Senge refers to a Royal Dutch/Shell survey which found that one third of the firms in the Fortune “500” in 1970 had vanished by 1983.

## Modern Business Environment

In the late 80's thru mid 90's, corporations simply reduced numbers of employees in the pursuit of achieving more efficient business practices. This was an unsuccessful approach to achieving organizational efficiency. As Gary Hamel recently commented, "We argue that downsizing wasn't the only way to reap efficiency gains . . . 'corporate anorexia,' we termed it."<sup>4</sup> The overall effect of only cutting personnel numbers was that those left behind had to work increasingly harder and longer.<sup>5</sup> The critical need was to overhaul processes and structure. As noted in a recent Rand study, "Lessons from the corporate world emphasize that reengineering must be done company-wide, replacing the old organization with a new one."<sup>6</sup>

Today, companies realize that they must operate with low levels of authoritative control and certainty to remain efficient. They understand that, ". . . complex organizations and economies will function best when they are just at 'the edge of chaos'—a place that is orderly enough to ensure stability yet full of flexibility and surprise."<sup>7</sup> This operating belief has spawned "just in time" strategies in order to achieve efficiencies. To fully integrate a philosophy like this, successful businesses have adopted principles to allow their organizational structure to operate effectively in this environment.<sup>8</sup> The resulting transformation has aimed to flatten hierarchical organizational structure in order to speed business processes.

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<sup>4</sup> Hamel, 13.

<sup>5</sup> Marilyn K. Gowing and others, eds., remarked in *The New Organizational Reality* (Washington, DC: American Psychological Association, 1997), 38, that other negative effects from the automobile industries' downsizing in the late 80's included centralized decision-making and loss of innovativeness.

<sup>6</sup> Arthur F. Huber and others, *The Virtual Combat Air Staff: The Promise of Information Technologies* (Santa Monica, CA: Rand Corporation, 7 August 1996), 41.

<sup>7</sup> William E. Fulmer, *Shaping the Adaptive Organization* (New York: AMACOM, 2000), 62.

## Adaptive / Learning Organizations

The business world has come to understand that the most relevant organizations are those that are adaptive and able to evolve (i.e., “learning”). Rigid, inflexible structures are incapable of coping with the immense uncertainty in today’s corporate environment.<sup>9</sup> Thus, the focus of organizational structure has shifted to its ability to conform to the realities of the environment it must operate within. Adaptive organizations are also more focused on processes vice functions. They seek to identify core competencies and concentrate efforts around these areas. William Fulmer used the following company’s perspective to illuminate this concept:

As 3M leadership has long recognized, the key concerns about organizational structure are more than the focus of the various boxes, their size, and to whom each reports. The key is to do as 3M tries to do—whatever will enhance speed and flexibility so that the organization can respond to its changing environment faster than its competitors—enhance adaptation.<sup>10</sup>

There are five noteworthy characteristics that define an adaptive organizational structure:

- Decentralized
- High spans of control
- Extensive use of temporary structures
- Powerful information system
- Constantly evolves the structure<sup>11</sup>

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<sup>8</sup> Shifting of organizational goals from “optimizing” to “satisfying” facilitate operating in a chaotic environment. Thomas J. Peters notes in *Thriving in Chaos* (New York: Random House, 1987), 357, “The optimizer is by definition a centralizer, a hyper organizer.”

<sup>9</sup> Fulmer noted this characteristic in his book *Shaping the Adaptive Organization*, “. . . the uncertainty principle of business rests on the idea that the economic system in nonlinear. It has two basic but related corollaries, notions that challenge some of today’s most widespread management practices. First, you cannot predict the future. Second, the future will be less predictable than it was in the past.” Page 65.

<sup>10</sup> Fulmer, 196.

<sup>11</sup> Fulmer, 179.

Temporary structures are event driven working relationships established for limited periods of time. By forming transient “working groups,” companies have sought to remain responsive to situational developments in the market place. William E. Fulmer remarks, “I believe a concerted effort to use a variety of temporary structures can help the leaders of large organizations increase speed and organizational flexibility.”<sup>12</sup>

### **Shared Information and Collaboration**

The proliferation of information technology (especially E-Mail and group messaging) has created a marked improvement in corporations’ ability to share information and knowledge throughout their organizations. These tools have sped up organizations’ ability to adapt and improve in order to meet the ever-changing demands of the market. However, businesses must first transform their structure and processes to exploit these new informational tools. Thomas Peters sounds this warning to future corporate leaders:

Through new technology, increase factory flexibility; but beware that changes in organizational structure and attitudes must precede the new technology’s widespread application—this means destroying traditional functional barriers and inducing a radically increased level of day-to-day, non-hierarchical interaction among factory team members, designers, engineers, marketers, and field forces—and customers and suppliers.<sup>13</sup>

If a company can facilitate the free flow of information and knowledge, they can greatly increase the employees’ contributions to the organization. Therefore, a synergistic result can be achieved when all subordinates can have input into business processes. This is a distinct cultural change from traditional hierarchical structure. Thomas Peters quoted Bob Buckman, CEO (Chief Executive Officer) of Buckman Laboratories International of

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<sup>12</sup> Fulmer, 186.

<sup>13</sup> Peters, 158.

Memphis, Tennessee. “I realized that if I can give everyone complete access to information about the company, then I don’t have to tell them what to do all the time. The organization starts moving forward on its own initiative.”<sup>14</sup> This has an immense effect on the rapidity with which a company can operate and adjust.

## **Span of Control and Subordinate Empowerment**

High spans of control are indicators of an adaptive organization. A supervisor’s span of control is a function of the number of subordinates who have direct reporting authority to him/her. As the number of reporting individuals increases, the supervisor is compelled to allow greater initiative to his subordinates because he is unable to provide close surveillance to all. The CEO of AlliedSignal remarked that he, “. . . widened the span of control so that instead of a person having three people reporting to them, more typically now it’s ten.”<sup>15</sup>

Wide spans of control reduce the layers of bureaucracy in an organization. This is critical because it keeps the top executives in proximity to the conditions that exist in their business (what is referred to as situational awareness in the military). Evidence for this is cited by Thomas Peters, “A meticulous 1985 study of forty-one large companies by management consultants A.T. Kearney contrasted winning and losing companies on the

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<sup>14</sup> Fulmer, 194. Peters also uses Buckman Laboratories to illustrate the positive effect that shared information has on a company, “Pieter Martin, manufacturing manager of Buckman Labs’ plant in Ghent, Belgium, wanted to improve communication between departments. When he installed what he thought would be a perfect communications system, he noticed an unintended result. Martin had invested \$5,000 in walkie-talkies for eighteen employees that would allow the warehouse workers to contact the shipping department, for instance, or the lab supervisor to call the production line without bothering the maintenance crew. But the walkie-talkies of two of the workers didn’t work right—they picked up all the interdepartmental chatter. Martin says, ‘They didn’t tell us. And eventually I noticed that at meetings those two were so involved, asking lots of questions and offering solutions to problems in other departments.’ When he discovered the reason was the ‘flawed’ walkie-talkies, he didn’t try to get them fixed. Instead, he traded them in for a downgraded system to allow everyone to listen in on everyone else.” Page 288.

<sup>15</sup> Fulmer, 185. Peters notes in *Thriving in Chaos*, “By 1987, . . . advanced Ford and GM experiments had removed all formal supervisor designations . . . Where the first-line supervisor’s job is not being de facto eliminated, it is being changed. . . increasing spans of control from, say, one supervisor to ten non-supervisors to one supervisor to 50 to 75 workers.” Page 300.

basis of long-term financial performance. Winners had 3.9 fewer layers of management than losers (7.2 versus 11.1) . . .”<sup>16</sup>

A “wider” structure also reduces the number of middle managers needed to operate a business. However, the flattening of organizational structure has many advantages beyond a simple savings in supervisors. The greatest benefit is derived from the empowerment of lower level workers. William E. Fulmer reflects this when he quotes Arno Penzia, Bell Lab’s chief scientist, “The problem with hierarchies is that people at every level have the power to say no.”<sup>17</sup> By reducing organizational layers, a company will directly increase the autonomy of its workers. This measure will contribute to a company’s success as noted by Marilyn K. Gowing, “. . . leaders of these [profitable] enterprises were always quick to point out, their profit was the result of creating an environment that liberated people’s creativity, nurtured their commitment, and inspired their discretionary effort.”<sup>18</sup>

### **Self-Synchronizing Teams**

Businesses who assume a less vertical organization require the lower level working groups to be responsible for their own management and correction. The importance of “self-synchronized” teams was described by Tom Peters as:

The modest-sized, task-oriented, semi-autonomous, mainly self-managing team should be the basic organization building block. Be aware that the wholesale use

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<sup>16</sup> Peters, 360. He also observed that, “No more than five layers of management are necessary, regardless of firm size, limit layers in any facility to three at most.” Page 354. Fulmer in *Shaping the Adaptive Organization* mentions, “Bill Gates has long had a goal for Microsoft to have no more than six levels of management between [him] and anyone in the company.” Page 185. In addition, Fulmer quotes Farrell Kramer, “GE’s Welch: America’s Most Sought-After CEO,” *Investor’s Business Daily*, February 18, 1993, in describing the end effect of multiple layers of structure, “We begin to erect layers of management to smooth decision-making and control all that growth, and all it does is slow us down.” Page 176.

<sup>17</sup> Fulmer, 184. Fulmer quotes Scott Woolley, “Brain Drain,” *Forbes*, July 27, 1998, 44, when he describes why Tom Evslin, who founded and ran World Net, AT&T’s 1-million-subscriber Internet Access division, departed AT&T to start a new company, “I left because you needed 17 approvals for a decision.” Page 176.

<sup>18</sup> Gowing, 226.

of a self-managing team structure probably calls for elimination of the traditional first-line supervisor's job.<sup>19</sup>

This organizational style requires a different skill set than previously needed from corporations' low-level managers. Figure 4.0 describes the modified nature of the responsibilities of "First Level Supervisors" in a flattened, increased span of control, and self-synchronized / subordinate empowered organization.

<b>The Changing Nature of First-Level Supervision</b>	
<i>Old</i>	<i>New</i>
<ul style="list-style-type: none"> <li>• 10 people reporting to him or her</li> <li>• scheduler of work</li> <li>• rule enforcer ("manager" of the union contract on management's behalf, if applicable)</li> <li>• lots of planning</li> <li>• focused "down" (or "up") the structure</li> <li>• transmitting middle/top management's needs "down"</li> <li>• providing new ideas for workers</li> </ul>	<ul style="list-style-type: none"> <li>• 50 to 75 "direct reports"</li> <li>• coach and sounding board for self-managing team leaders/coordinators, working on training to emphasize skill development</li> <li>• facilitator, getting experts to help the teams as needed</li> <li>• lots of wandering</li> <li>• focused "horizontally," working with other functions to speed action-taking</li> <li>• selling teams' ideas/needs "up"</li> <li>• helping workers/teams develop their own ideas; providing ideas for cross-functional systems improvement</li> </ul>

**Figure 4.0**<sup>20</sup>

## **Information Technology and Virtual Business**

Nothing has had a greater effect on the shape of business today than the emergence of a myriad of information generation / distribution technologies. Gary Hamel noted this effect recently, "Digital communication [and information technology] drills through layers of

<sup>19</sup> Peters, 296. Peters also depicts in a diagram that, "... [business structure that] was hierarchical, [with] functional integrity maintained [now] must become flat, [with] functional barriers broken, first-line supervisors giv[ing] way to self-managed teams, [and] middle managers as facilitators rather than turf guardians." Page 43.



bureaucracy, undermines hierarchy, makes much of middle management redundant . . .”<sup>21</sup>

The proliferation and accessibility of electronic data portals have significantly altered the manner in which companies conduct day-to-day business. William Fulmer commented, “The advent of group software . . . ha[s] the potential to fundamentally change the workplace by destroying the traditional command and control structure so common in large organizations.”<sup>22</sup> These modern technological advances have allowed much of corporate America to conduct business as a virtual organization.

Virtual organizations can take many different shapes. They are “corporations built on ad hoc or informal relationships, mobile workplaces, global production networks, and telecommuting.”<sup>23</sup> These businesses operate in an electronic world (vice physical) and are facilitated by an array of information technology aids that include cell phones, FAX, E-Mail, Internet, and personal data assistants (PDAs or palm top computers). The Rand Corporation recently noted:

The move toward virtual companies has been the result of the emerging notion of “agility” and the efforts of individual companies to become agile . . . agility can be defined as the capability to operate profitably in a competitive environment of continually and unpredictably changing customer opportunities.<sup>24</sup>

Virtual organizations (and associated structure) have a level of flexibility rarely seen in physical businesses and therefore can achieve rapid adjustments to market developments.

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<sup>20</sup> Peters, 301.

<sup>21</sup> Hamel, 289.

<sup>22</sup> Fulmer, 194.

<sup>23</sup> Huber, xii.

<sup>24</sup> Goldman, Nagel, and Preiss, *Agile Competition and Virtual Organizations* (New York: Van Nostrand Reinhold, 1995) cited in Huber, 31.

## Network Organizational Model

An organizational model has been developed which may effectively incorporate information technology with the emergent business concepts discussed earlier. This structural format is called the “network model.” Harry Dent describes its structure as:

Management in such an organization is like a self-regulating database at the center of a computer network. It maintains essential cultural principles and information, continuously seeks to improve how it organizes, and furnishes data to everyone who needs it (including the management team itself), and makes sure that such information is available in real time—where it’s needed within the organization.<sup>25</sup>

The main features of the network model for organizations are (see Figure 4.1):

- Leadership at the center, not management at the top.
- Front-line human browser teams that customize solutions and represent the customers by connecting them directly to servers or specialized products and experts.
- The radical elimination of bureaucracy, not mere streamlining or improvements in a company’s present system.
- An internal, free marketplace that makes every front-line or back-line team as accountable to customer satisfaction and profit and loss as an outside business.<sup>26</sup>

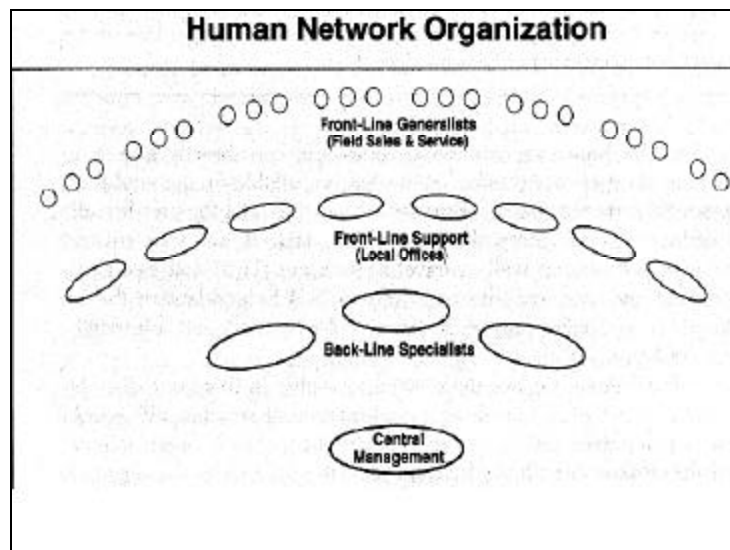


Figure 4.1<sup>27</sup>

<sup>25</sup> Harry S. Dent Jr., *The Roaring 2000s* (New York: Simon & Schuster Inc., 1999), 138.

The network model facilitates rapid adjustments to new information and market developments. It is agile enough to quickly respond to customer needs and desires. Its inherent advantages over current business organization was further described by Harry Dent as:

Network organizations are fast, responsive, customizing, and entrepreneurial, where going with the flow is the only possible path. Hierarchical assembly-line organizations are just the opposite: slow, inflexible, standardizing, and highly managed, planned, and coordinated.<sup>28</sup>

## Conclusion

The chaotic nature of modern economies has forced the corporate sector to critically examine the way it is structured in order to remain relevant in a world of rapidly changing economic markets. It has concluded that to remain agile and responsive, it has had to update its structural paradigms. As noted by Peters, “One of the most dramatic requirements associated with increasing responsiveness is to shift the organization’s entire ‘way of being’ from a ‘vertical’ (hierarchical) to a ‘horizontal’ (fast, cross-functional cooperation) orientation.”<sup>29</sup> Industry leaders realize that “[c]ompanies organized as traditional, bureaucratic hierarchies simply can’t respond quickly enough, no matter how their bureaucracy is streamlined.”<sup>30</sup>

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<sup>26</sup> Dent, 137-138.

<sup>27</sup> Dent, 150.

<sup>28</sup> Dent, 137. Dent uses the “Whale vs. The School of Minnows” analogy to depict the advantages of the network organizational model over conventional structure. He describes, “A Whale is a massive, powerful, organization, vertically integrated . . . employees follow the game plan devised at the top and passed down through intricate layers of bureaucracy. . . The School of Minnows is the new network organizational model [which] operates like a school of minnows, not a whale. It is comprised of individuals and self-managing teams who share critical information in real time for fast, informed decision-making. Each one . . . guided by centralized leadership that establishes the company’s strategic focus and agrees on its core competencies . . . such organizations can have the mass of a whale but, like a school of minnows, can turn, change, and respond instantly—exactly what’s needed for our world of fast-changing technologies and individualistic consumers.” Pages 140-141.

<sup>29</sup> Peters, 366.

<sup>30</sup> Dent, 136.

Not all initiatives in the business world are of utility to the military environment. David Coffman noted in a recent award-winning essay, “The danger in applying business solutions to the conduct of war is in failing to recognize what is not transferable.”<sup>31</sup> The military environment is indeed more complex and less accepting of error than any boardroom in the world. The military mission of national defense is vastly different than the pursuit of profit.

However, some challenges that confront corporate America also face the American military. Operating on a chaotic battlefield with limited knowledge, and attempting to make timely decisions in order to create tempo faster than any competitor, is as true for a U.S. unified command as it is for any large corporation. Companies attempt to control profit tempo in the same way the military desires to control operational tempo. Situational awareness is a highly sought commodity for both CINCs and corporate leaders. The DoD must therefore understand, as many modern businesses do, that “[t]he danger in re-engineering, however, is that it merely reinforces the top-down, hierarchical, organizational model of the past century while masquerading as a revolutionary change.”<sup>32</sup> What is truly required, to remain potent in the rapidly changing world environment, is genuine organizational revision.

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<sup>31</sup> David W. Coffman, “Operational Art and the Human Dimension of Warfare in the 21<sup>st</sup> Century,” in *Chairman of the Joint Chiefs of Staff Strategy Essay Competition—1999* (Washington, D.C.: National Defense University Press, 1999), 82.

<sup>32</sup> Dent, 136.

## Chapter 5

### **EMERGENT MILITARY CONCEPTS: 'Network Centric & Effects Based Warfare'**

*Nowhere is the effect of developments in communications and access to information more far-reaching than on warfare. In the purely military realm, information dominance can create operational synergies by allowing those systems that provide battlespace awareness, enhance command and control, and create precision force to be integrated into the so-called "system of systems" . . . [e]qually important, shorter time for decisions—occasioned by both the compressed continuum of war and electronically gathered information—means less time to discover ambiguities or to analyze those ambiguities that are already apparent.<sup>1</sup>*

- David Jablonsky in *Parameters*, Spring 1997

*Success lies not in the technologies themselves but in developing the right concepts of operations and organizational structures to best exploit them.<sup>2</sup>*

- Andrew W. Marshall, Dir. For Net Assessments, OSD

### **Introduction**

During the last decade, the American military has undergone a critical self-examination similar to what businesses in the civilian sector experienced. The dissolution of the Warsaw Pact, coupled with an exponential growth in world chaos and conflict, positioned the U.S. DoD on the precipice of organizational uncertainty. Concurrently, the military has had to adjust for a drastic draw down after the Gulf War and transform into a smaller, more capable force. The recent development of an

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<sup>1</sup> David Jablonsky, "National Power," *Parameters*, Spring 1997, 48.

abundance of military related information technologies was touted to hold the promise of clean, quick, and precise military operations. However, technology alone has not proven to be the Holy Grail that its proponents in the “Revolution in Military Affairs” movement had once promised. We’ve come to understand, as Dr. David S. Alberts states, “A technology insertion strategy designed to fully leverage information technologies requires alterations in our concepts of operation, doctrine, organizations, and force structure.”<sup>3</sup>

Emergent military concepts like Network Centric<sup>4</sup> and Effects-Based Warfare<sup>5</sup> are now being explored which dramatically shift the manner in which military campaigns, at the operational level of war, are prosecuted. These initiatives attempt to coherently link technological innovations (especially informational) with changes in military organization, doctrine, and training. The goal is to achieve a “speed of command” which will allow U.S. forces to achieve tempo dominance in any future conflict. To accomplish this goal, the military will need to transform its command structure and processes. As noted in a recent study of military headquarters efficiency, “We see a recognition of the need for an immediate shift to distributed information, decentralized distribution of authority, distributed decision making, and continuous planning.”<sup>6</sup>

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<sup>2</sup> Arthur F. Huber and others, *The Virtual Combat Air Staff: The Promise of Information Technologies* (Santa Monica, CA: Rand Corporation, 7 August 1996), 27.

<sup>3</sup> David S. Alberts, *The Unintended Consequences of Information Age Technologies: Avoiding the Pitfalls, Seizing the Initiative* (Washington, DC: GPO, April 1996), 11.

<sup>4</sup> The “Network Centric” model attempts to transform the military paradigm away from being “platform-centric” and focus on the final impact on the enemy’s ability to resist. In David S. Alberts, John J. Garstka, and Frederick P. Stein, *Network Centric Warfare: Developing and Leveraging Information Superiority*, 2d ed. rev., DoD C4ISR Cooperative Research Program Publication Series, (Washington, DC: GPO, August 1999), Network Centric Warfare is described as, “. . . an information superiority-enabled concept of operations that generates increased combat power by networking sensors, decision makers, and shooters to achieve shared awareness, increased speed of command, higher tempo of operations, greater lethality, increased survivability, and a degree of self-synchronization.” Page 2.

<sup>5</sup> “Effects Based Warfare” goal is purposeful synchronized actions throughout the friendly force. This model requires all components to collaborate over effects domain (e.g. air, land, space, sea). From discussion with Dr. Richard E. Hayes, Ph.D., President, Evidence Based Research, Inc., interview by author, 1 December 2000.

<sup>6</sup> DARPA sponsored study conducted by Evidenced Based Research, Inc., Vienna, VA.

## Situational Awareness

Military commanders throughout history have sought to gain and maintain situational awareness of the battlefield. This has allowed them to make timely and informed decisions on which courses of action to adopt. Victory has usually belonged to the leader who can achieve the highest level of understanding of current conditions.<sup>7</sup>

During Napoleon's time, a commander could usually achieve awareness by physically locating himself where he could observe his various subordinates' actions (as well as those of the enemy). When Napoleon could not visually observe his subordinates, he would dispatch trusted aides to get a sense of the conditions at their locations (what Martin Van Creveld called "directed telescopes").

Today's CINCs are confronted with complex, widely dispersed AORs that require a host of tools to maintain the same level of awareness. Although the CINC may be able (with the availability of aircraft) to travel far outside his headquarters on a regular basis, he is still heavily reliant on his staff to provide him the knowledge of situations in his theatre. New systems, like the "common operating picture" (C.O.P.), promise to provide a common understanding of conditions throughout the command. However, without making the information in the C.O.P. relevant, there is a risk of overloading the commander and his staff with an overabundance of information. As noted in a recent article by Commander Alan Zimm, USN:

In warfare employing TID [total information dominance] and NCW [net centric warfare], data will be as voluminous as that on the movements of the heavens. Unless there is a framework in which to view it, to understand its patterns, and to selectively concentrate on or ignore individual elements, its volume will be debilitating.<sup>8</sup>

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<sup>7</sup> During World War II, German Field Marshal Erwin Rommel was often found at the front moving with the lead elements of his panzer formations in an attempt to achieve and maintain situational awareness.

<sup>8</sup> Alan D. Zimm, CDR, USN (Ret.), "Human-Centric Warfare," *U.S. Naval Institute Proceedings*, May 1999, 30.

## **Shared Awareness**

Shared awareness is the manner in which situational awareness is dispersed throughout an organization. Military staffs must organize themselves to facilitate a high level of understanding throughout their structure in order to make rapid decisions. Hierarchical, compartmented arrangements (as currently being used in most CINC staffs) are not very conducive to expedient flow of this knowledge.

There is a myriad of technological awareness aides now being fielded to assist military staffs in achieving timely shared knowledge. Video teleconferencing, Internet “virtual” meetings, shared “white boards,” and a proliferation of mobile communication devices are being developed in an attempt to increase the information flow throughout the command structure (staff and subordinate units). However, if the organizational ethos does not sponsor and enforce shared knowledge, these tools will remain unexploited.

## **Collaboration**

In order to achieve increased speed of decision cycles, all segments of a military staff must be able to coordinate and converse with each other across structural boundaries. Unfortunately, current stove-piped staff structure does not freely allow collaboration. Information and subsequent knowledge must currently make its way up and around hierarchical relationships. Shared awareness allows collaboration to occur, but without the creation of a permissive command environment, rigid organizational structure will inhibit the free exchange of knowledge.<sup>9</sup>

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<sup>9</sup> Several important aspects of collaboration should be understood. There is no one formally in charge during a truly collaborative process--its imbedded in a network of peers. The efforts during collaboration are guided by “commander’s intent.” To collaborate effectively, one must know the state of the other participants so that you know what information should be offered. Current hierarchical staff structure erects control measures that divide “battle space” to domains of expertise. This is a major inhibitor to collaboration in our current staff structure. From 1 December 2000 interview with Dr. Hayes.



Collaborative planning tools are now being developed that facilitate knowledge integration over time, function, space, and echelon.<sup>10</sup> A “shared white board” is one example of a technological tool which allows all members of the staff / command to observe concepts as they develop and have input into them.<sup>11</sup> Although collaboration may increase the initial time spent planning, it will save time during the subsequent issuance of orders and directives.<sup>12</sup>

## **Distributed Functions**

Traditional staffs (as illustrated earlier) have traditionally focused their organization on vertical structure arranged around functional specialization (i.e., “J”-Sections). Functional organization is an artifact of the industrial age. This structural paradigm must now shift to a focus on processes. As noted by Rand, “In a reengineered company, divisions and department based upon specialized functions are replaced by teams organized by process.”<sup>13</sup> To accomplish this, modern staffs will have to determine innovative ways to distribute necessary functions throughout their staffs / subordinate commands in order to support critical processes.

Most military functions are still important, and should not go totally away. However, the information age allows us now to disperse functions around the battlefield in order to have great flexibility in who performs them (and where they are performed). This supports the modern reality of reducing the footprint of headquarters staffs that we

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<sup>10</sup> As further discussed during interview with Dr. Hayes.

<sup>11</sup> This is a digitally linked screen which replaces traditional “dry erase white boards” or other planning mediums. Staffs will not just issue warning orders to subordinates, in the future subordinates will be able to observe as plans develop and therefore anticipate requirements. Also from Dr. Hayes interview.

<sup>12</sup> Staff members and subordinate units that participate in collaboration will attain ownership of the final plan. They will be fully “up to speed” on its contents and will have already begun their planning / preparation before the actual issuance of orders. This is a manner in which staffs can build planning tempo in their command.

<sup>13</sup> Huber, 37.

deploy into theaters of conflict. As succinctly stated by General A.C. Zinni to a staff member: “I want your function, but I don’t want you.”<sup>14</sup> New capabilities like communications “reach back” may allow a majority of CINC / JTF staffs to remain out of theater, but still project their functions forward.

## **Adaptable Organizations**

The most effective military organizations have always been able to adapt to the realities of the situation that confront them. Staff organization is no exception to this principle. Operational staffs often reconfigure themselves to handle the specific responsibilities of the unique environment that they are placed in.<sup>15</sup> However, as soon as a contingency is concluded, they return to the traditional structure they had used before (in order to return to “real staff work”). As General Zinni noted, “Every time we go to war, or we have a crisis, we change the staff. We have a peace-time, daytime functional wire diagram staff . . . but we [create] about 150 “unique” cells . . . why can’t we capture this and be organized in this way everyday?”<sup>16</sup>

## **Mission Capability Packages**

The Network Centric Warfare concept of “Mission Capability Package” (MCP) may hold the key to achieving the highest level of adaptability. This type of organization “consists of a concept of operations, command approach, organization, systems, and people with a prescribed level of expertise. Implicit in an MCP is the nature, distribution,

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<sup>14</sup> General Zinni noted that when he was the I MEF Commander, he had to deploy a majority of his staff every place he went. During operations in Somalia, I MEF had to put 600 people on the ground from the staff. General Zinni would have desired a “reach-back” or “push forward” capability to reduce his staff structure. Taken from General Anthony C. Zinni, USMC (Ret.), CINCCENTCOM from 1997-2000, interview by author, 12 October 2000.

<sup>15</sup> General Zinni noted, “[A] staff [should be] adaptable, flexible, agile, and chameleon-like wrap itself around a mission (today is combat, tomorrow is humanitarian).” General Zinni interview, 12 October 2000.

<sup>16</sup> General Zinni, interview, 12 October 2000.

and utilization of information.”<sup>17</sup> MCPs allow military staffs to change their capacity to handle complex, new situations and coherently determine what course of action to adopt.<sup>18</sup> It assumes a relevant organizational structure that can handle the detailed requirements of a given scenario with speed and skill. After the specific need for an MCP no longer exists, the elements are dispersed back to their original domain.

### **Virtual Organizations**

Virtual structure is another technique to design adaptable headquarters organization. As described in a recent Rand study:

. . . *virtuality* refers to the concept that not all elements of a staff may be physically located in the same place, that communications technology may allow for the retrieval of information resources from diverse centers of responsibility, and that staff assets may be reabsorbed into host centers after the cessation of hostilities.<sup>19</sup>

This type of organization is crafted for finite periods of time and may only exist in cyberspace vice a physical headquarters. Expertise may be drawn from organizations around the world and may coalesce in a secure “planning cell” in the digital medium. This would allow the most sophisticated fusing of diverse, knowledgeable advice without having to form a clumsily large headquarters staff.

### **Staff Empowerment and Self-Synchronization**

Members of a military staff should be inculcated with the same aggressive level of initiative that is expected of military commanders. This requires staff leaders to allow action officers to have complete information access and be able to make autonomous decisions.<sup>20</sup>

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<sup>17</sup> Alberts, Garstka, and Stein, 193.

<sup>18</sup> There exists a linked relationship between structure, function, and capacity. MCPs allow staffs to go beyond improving functional structure; they also increase organizational capacity. From interview with Dr. Hayes, 1 December 2000.

<sup>19</sup> Huber, iii.

<sup>20</sup> “An empowered workforce must have the freedom to make autonomous decisions.” As noted in Huber, 38.

However, the situation that currently exists in U.S. military staffs was described by Martin Van Creveld as:

The more specialized the members and units of any given organization, the less capable any of them separately is of making independent decisions that may affect the whole, and the greater the need for overall direction from the top . . . Furthermore, an organization with a high decision threshold—that is, one in which only senior officials are authorized to make decisions of any importance—will require a larger and more continuous information flow than one in which the threshold is low.<sup>21</sup>

A headquarters can achieve planning tempo by empowering their staff members to arrive at closure on critical issues without needing approval from their superiors. This initiative must be “coordinated” under the umbrella of commander’s intent.

Self-synchronization is an emergent behavior in all organizations.<sup>22</sup> It requires time to be achieved and when it occurs, it allows organizations to operate with an extremely high level of decentralization. This in turn builds efficiency and rapidity in staff processes. Military staffs can achieve a modicum of self-synchronization if they are empowered to adjust to situational factors without having to seek approval. It also requires staff “players” to practice together enough to build an implicit understanding of team dynamics and status. A “command climate” which fosters this is essential.

## Conclusion

For American unified commands to move toward “Net Centric” and “Effects Based” Warfare, staff organization and processes will have to be modified to fully exploit the advantages of new technologies. This transformation will have to focus on organizational

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<sup>21</sup> Martin L. Van Creveld, *Command in War* (Cambridge, MA: Harvard University Press, 1985), 236.

<sup>22</sup> The concept of self-synchronization was discussed at length during the author’s interview with Dr. Hayes, 1 December 2000. Emergent behaviors are not engineered but happen on their own. The example of an Olympic rowing team was discussed. This type of organization works / trains together to such an extreme degree that they can adjust to the minute nuances of each other’s rowing speed, tempo, and technique without higher direction (as long as the coxswain allows this of course). The example of a basketball team during a “fast break” has also been used to describe how self-synchronization can operate.

structure and staff responsibilities. Many new processes can be used to link cutting edge technology with reengineered staff structure. Figure 5.0 depicts how current military organization can be transformed to support Net Centric Warfare.

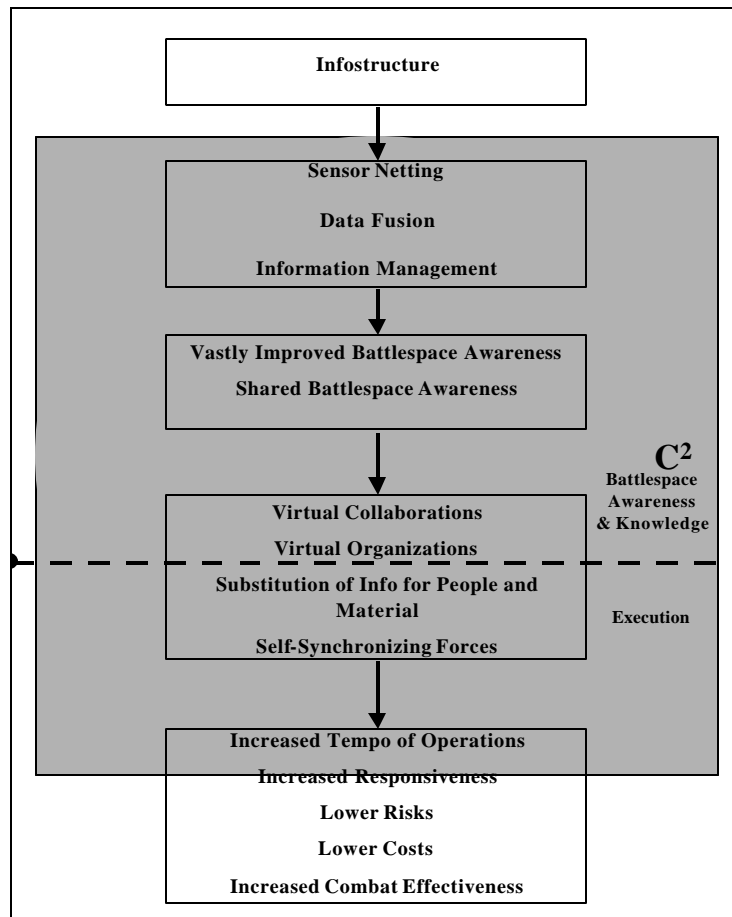


Figure 5.0<sup>23</sup>

Much like the corporate world has already done, military staffs will have to look to a new paradigm to remain relevant in the future. As observed by the Rand study, “Whereas the past has seen a general trend of growth in staff size and dependence on hierarchical constructs, the future may actually see something approaching the opposite.”<sup>24</sup>

<sup>23</sup> Adopted from “The Network Centric Enterprise,” Alberts, Garstka, and Stein, 89. This diagram depicts the positive command & control consequences (for an operational staff) of instituting the organizational dynamics described in this chapter. Note the top listed benefit (in the bottom box of “Execution”) achieved is “increased tempo of operations.”

<sup>24</sup> Huber, xii.

## **Chapter 6**

### **U.S. SPECIAL OPERATIONS COMMAND: ‘Organized for Success’**

*We must also realize that the benefits of technological change cannot be fully realized until they are incorporated into new organizational forms – SOF organizational innovation is as important as innovation in weapon systems. Replacing technology without replacing old structures will not work.<sup>1</sup>*

- General Peter J. Schoomaker, USA (Ret.), Former CINC USSOCOM

#### **Command History**

Congress established United States Special Operations Command (USSOCOM) on April 16, 1987 per the Defense Authorization Act of 1987. “This act directed the establishment of USSOCOM and assigned it certain military department-like functions to oversee special operations forces of the Army, Navy and Air Force.”<sup>2</sup> USSOCOM was created partly to revitalize the special operations community’s image that had been tarnished by the tactical failures during “Eagle Claw” (the failed Iranian hostage rescue) and “Urgent Fury” (the invasion of Grenada). It became the lead headquarters for all American special operations forces. It was also authorized a unique additional responsibility in 1989. “USSOCOM [manages] its own program and budget authority and head of agency authority under Chapter 137 of Title 10 of the United States Code for the development and acquisition

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<sup>1</sup> “Keeping the Ball Rolling: Sustaining the Gains of Organizational Change at U.S. Special Operations Command,” USSOCOM Power Point Presentation, provided on 30 October 2000 by COL Lee U. Hoffman, Director, Innovation and Improvement, USSOCOM Staff, Slide 26.

of special operations-specific equipment, material, supplies, and services.”<sup>3</sup> They therefore act like a service headquarters “as they match limited [fiscal] resources to a lengthy list of competing requirements.”<sup>4</sup>

USSOCOM is headquartered at MacDill Air Force Base in Tampa, Florida. It has authority over Joint, U.S. Army, U.S. Navy, and U.S. Air Force special operations component commands. These subordinate headquarters are geographically dispersed throughout the United States. Figure 6.0 depicts the command arrangement for USSOCOM.

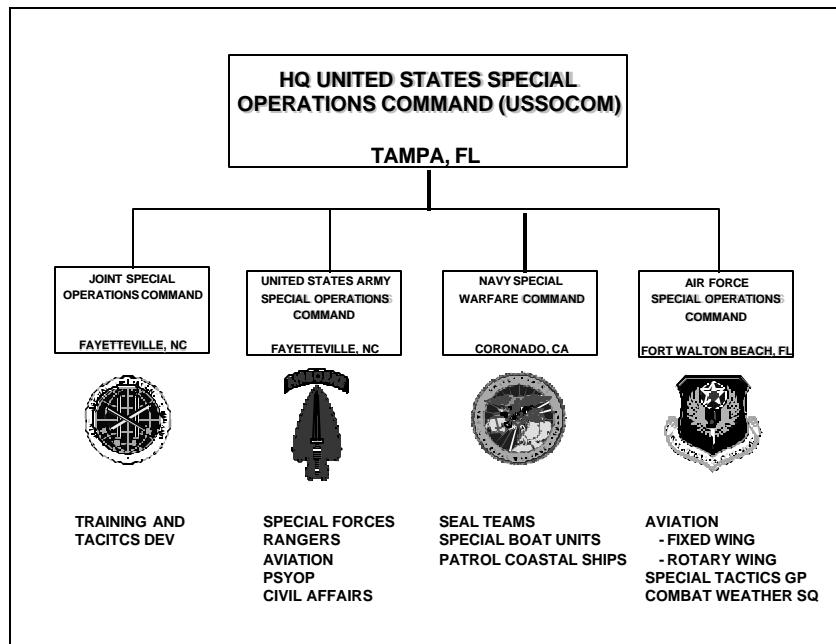


Figure 6.0<sup>5</sup>

USSOCOM is a functional unified command that is a special operations force provider to the geographic CINCs. It develops strategy, doctrine, and tactics for special operations forces and has training responsibility for all assigned units. USSOCOM can also exercise command of selected special operations missions if directed by the President or the Secretary of Defense.

<sup>2</sup> Logistics Management Institute, *USSOCOM Organization and Staffing Analysis: Challenges and Opportunities*, Study, SO701R1, September 1997, 1-1.

<sup>3</sup> Logistics Management Institute, 1-1.

<sup>4</sup> Logistics Management Institute, 1-5.

## **Unilateral Command Review**

In 1997, General Henry H. Shelton, USA, then-CINC USSOCOM, commissioned the Logistics Management Institute (L.M.I.) to conduct a thorough analysis of his headquarters organizational structure, staffing, and key functional processes.<sup>6</sup> He initiated this study because of a perceived need for organizational refinement. He posed eleven critical questions to L.M.I. about the efficiency of USSOCOM's staff.<sup>7</sup> Many of General Shelton's queries dealt specifically with staff structure and functions. The study favorably noted, "This self-starting approach to business process reengineering is commendable since in many cases, organizations only begin considering ways to improve their operations after receipt of a numerical reduction . . ."<sup>8</sup>

## **Transformation Initiated**

In November 1997, General Peter J. Schoomaker, USA, assumed the duties as CINC SOCOM. He was eager to remedy the widely recognized inadequacies of the headquarters' "J" structure. Utilizing the L.M.I. study for direction, General Schoomaker directed the reorganization of the USSOCOM staff along core functions. His goal was a staff that would be "a complex, holistic, integrated system like no other CINC-dom."<sup>9</sup> The old staff structure is depicted in Figure 6.1; the new staff organization is illustrated in Figure 6.2.

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<sup>5</sup> "Keeping the Ball Rolling: Sustaining the Gains of Organizational Change at U.S. Special Operations Command," Slide 5.

<sup>6</sup> There were four areas to be analyzed by the study: 1) conduct of staff management and business processes and procedures, 2) measurement and management of performance and accountability, 3) composition and placement of staff functions/activities, and 4) organizational structure and design. From Logistics Management Institute, 1-1.

<sup>7</sup> The eleven questions were: Are there staff functions that should be added, eliminated, or modified to achieve effectiveness and efficiency while reducing redundancy? Are there staff functions that could / should be outsourced or privatized? Are there staff functions that should be decentralized to our components and / or the [CINC] SOCs? Are there component and / or SOC functions that should be centralized at USSOCOM? How can we streamline our C<sup>4</sup>I activities? How can we improve our internal/external suspense system? How can we establish/improve our metrics system to measure progress and ensure accountability? How can we improve our internal communications flow? How can we streamline our planning, programming, budgeting, acquisition, and procurement processes? How can we improve our manning activities? How can we improve our support for component and SOC logistics requirements? From Logistics Management Institute, 1-2.

<sup>8</sup> Logistics Management Institute, 1-3.

<sup>9</sup> COL Steven J. Hoogland, USA, Director, USSOCOM Washington Office, interview by author, 4 October 2000.



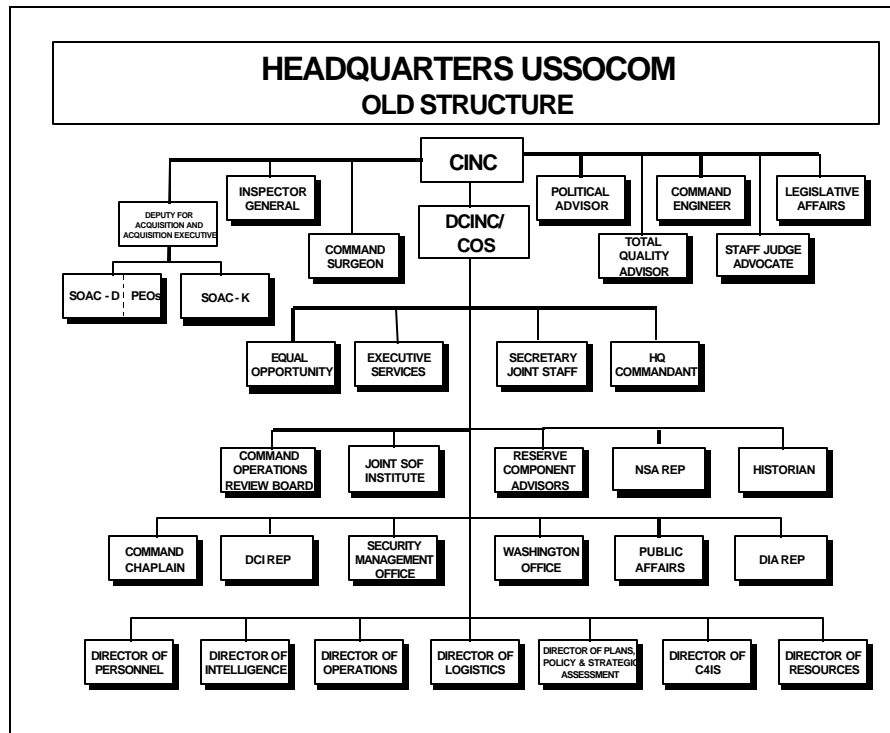


Figure 6.1<sup>10</sup>

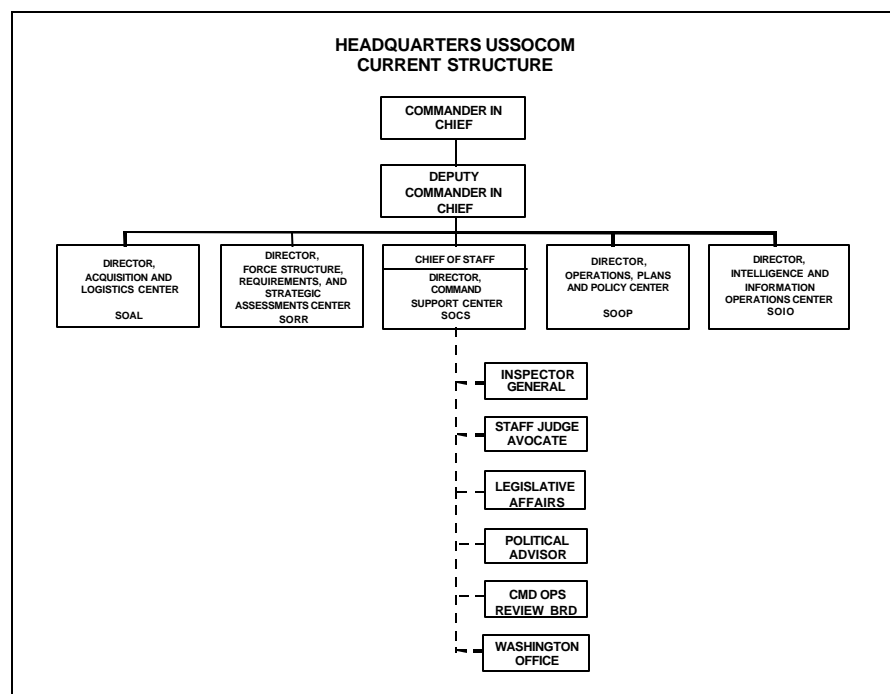


Figure 6.2<sup>11</sup>

<sup>10</sup> “Keeping the Ball Rolling: Sustaining the Gains of Organizational Change at U.S. Special Operations Command,” Slide 8.

<sup>11</sup> “Keeping the Ball Rolling: Sustaining the Gains of Organizational Change at U.S. Special Operations Command,” Slide 9.

## New CINC Format

In December 1997, USSOCOM transformed its staff structure into five “Centers” that correlated closely with the staff’s core functions: Acquisition, Operational Support and Oversight, Strategic Planning, and Resource Allocation.<sup>12</sup> These Centers are now named “Special Operations”: Acquisition and Logistics (SOAL); Force Structure, Requirements, Resources, and Strategic Assessments (SORR); Operations, Plans, and Policy (SOOP); Intelligence and Information Operations (SOIO); and Command Support (SOCS). Functions within each Center were thoroughly analyzed and certain staff responsibilities were eliminated (because of redundancy) while others were relocated from one Center to another. A General / Flag grade officer (or senior civil servant in the case of SOAL) was assigned as the director of each Center. Figure 6.3 depicts the specific “J” functions that were transferred into each Center.

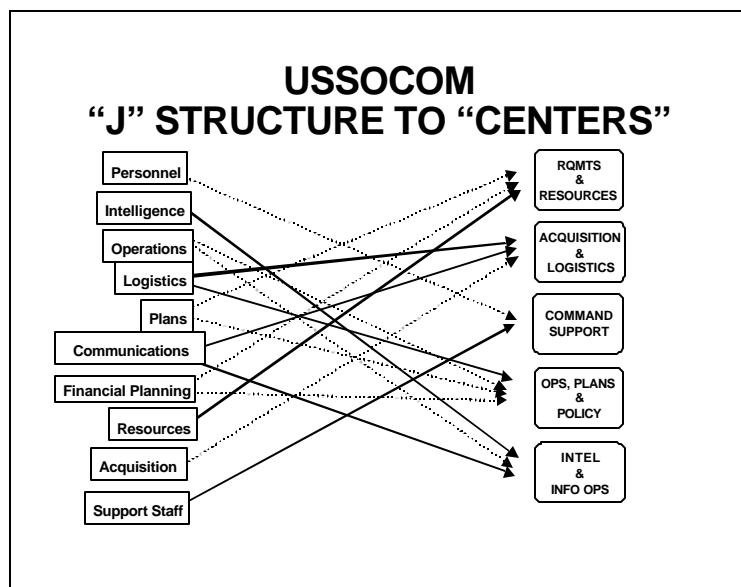


Figure 6.3<sup>13</sup>

The focus of USSOCOM’s headquarters reengineering was to emphasize lateral coordination within the staff while putting emphasis on critical processes vice functions. This

<sup>12</sup> USSOCOM unclassified memo, 1.

<sup>13</sup> “Keeping the Ball Rolling: Sustaining the Gains of Organizational Change at U.S. Special Operations Command,” Slide 11.

was done in order to reduce the “stove pipes inherent in the traditional “J”-structure.”<sup>14</sup> To accomplish this transformation, USSOCOM organized the Centers to operate as self-synchronizing teams, under Directors of balanced rank and responsibility, removing the requirement to use the Chief-of-Staff as the traditional staff choreographer. This allowed the CINC / DCINC to increase their span of control by making the Center Directors report directly to them. A “Board of Directors” was formed, which the CINC sat on with his Component Commanders and the Assistant Secretary of Defense for Special Operations-Low Intensity Conflict (a non-voting member)<sup>15</sup>, to focus on strategic issues of SOCOM. These initiatives effectively precipitated the transition “from a traditional military staff to an Informational Age staff that is matrix-shaped around core functions—more flexible and better postured . . .”<sup>16</sup>

## Matrix Based Model

USSOCOM’s matrix based model defines the staff’s processes / functions as a collection of “nodes” within its organization (see Figure 6.4).

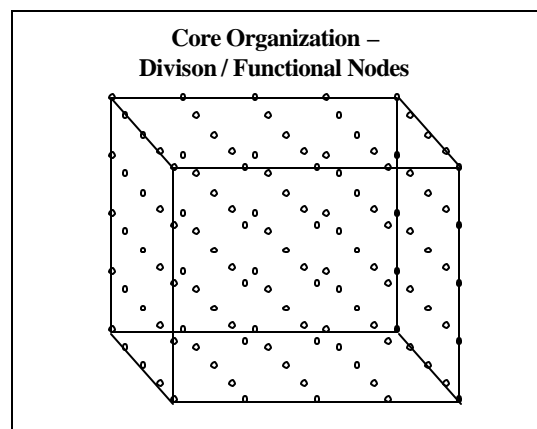


Figure 6.4<sup>17</sup>

<sup>14</sup> USSOCOM unclassified memo, 2.

<sup>15</sup> Described in e-mail from COL Lee U. Hoffman, USA, Director, Innovation and Improvement, USSOCOM Staff, 11 January 2001.

<sup>16</sup> “Headquarters Reengineering,” USSOCOM Power Point Presentation, provided on 30 October 2000 by COL Lee U. Hoffman, Director, Innovation and Improvement, USSOCOM Staff, Slide 3.

<sup>17</sup> “Matrix Based Organization,” USSOCOM Power Point Presentation, provided on 30 October 2000 by COL Lee U. Hoffman, Director, Innovation and Improvement, USSOCOM Staff, Slide 2.

These nodes are organized within the Centers under the Directors and Deputies (see Figure 6.5 and 6.6).

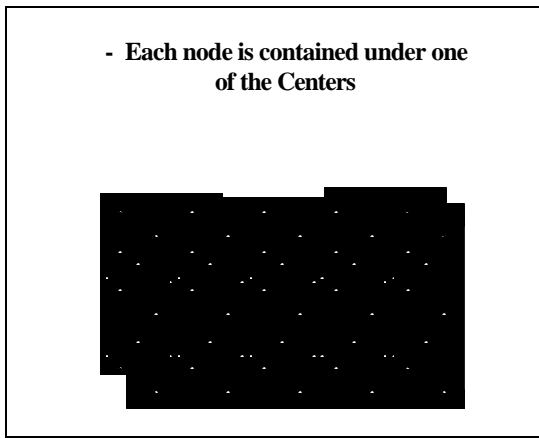


Figure 6.5<sup>18</sup>

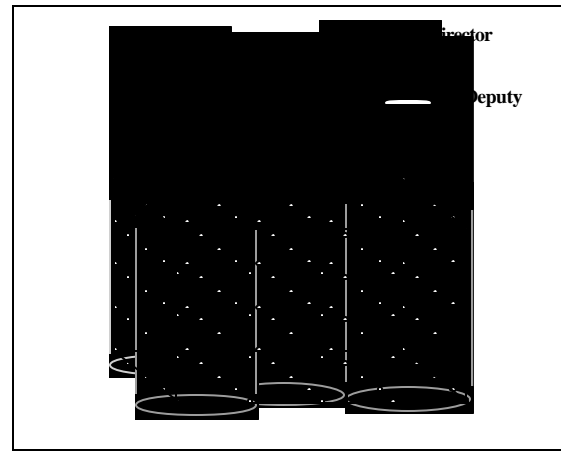


Figure 6.6<sup>19</sup>

All of the Centers' "cones" fall under the CINC / DCINC with the Secretary of the Joint Staff as the command "facilitator" (see Figure 6.7).

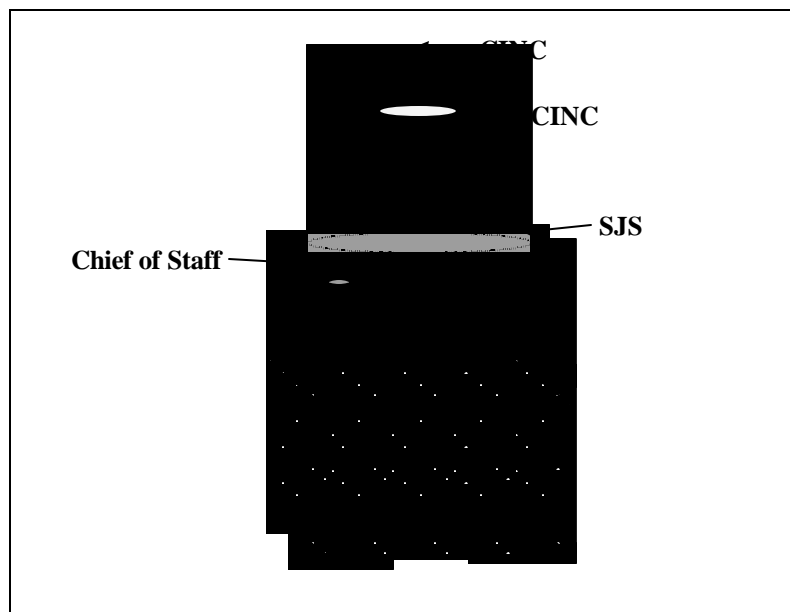


Figure 6.7<sup>20</sup>

<sup>18</sup> "Matrix Based Organization," Slide 3.

<sup>19</sup> "Matrix Based Organization," Slide 4.

<sup>20</sup> "Matrix Based Organization," Slide 5.

This model transforms SOCOM's staff coordination from a hierarchical structure (see Figure 6.8.0) to a collaborative / efficient multidirectional format (see Figure 6.8.1).

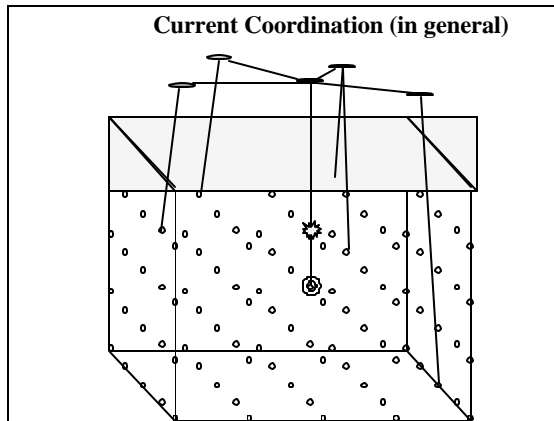


Figure 6.8.0<sup>21</sup>

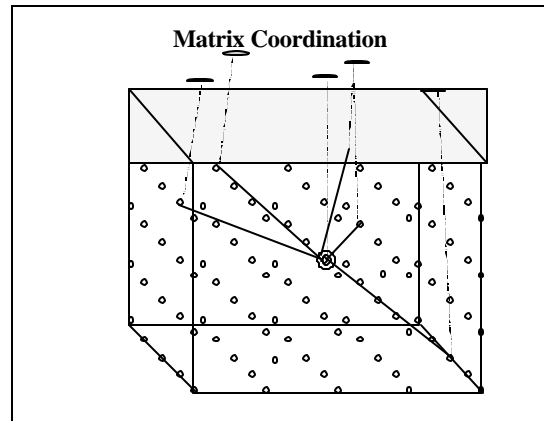


Figure 6.8.1<sup>22</sup>

This design facilitates each Center's action officers' ability to conduct direct coordination and planning with other Directorates. The overall objective of this approach is to expedite information and knowledge flow both within the SOCOM staff and external to the command.<sup>23</sup>

The command has attempted to exploit technology to leverage some of the information flow transformation that they desire. They employ a "SOC Web" site (accessible over secure internet) that allows all staff members and subordinate commands to have real time visibility of staff actions, suspense deadlines, and priority issues of the CINC. The staff has fully adopted E-Mail messaging as the primary means of staff coordination and this has gone far in turning the staff headquarters into a "paperless" command center.<sup>24</sup>

<sup>21</sup> "Matrix Based Organization," Slide 6.

<sup>22</sup> "Matrix Based Organization," Slide 7.

<sup>23</sup> USSOCOM believes that several specific advantages are achieved through the matrix-based structure. These include: minimizing staffing time / administrative overhead, maximizing organizational understanding, maximizing visibility of all coordinations (allows for further organizational review, selective interest insertion, and forces responsibility to the nodes--deputies resolve issues / conflict), and can be extended to include components and sub-unified command. From "Matrix Based Organization," Slide 11. They also cite their staff processing cycle time per quarter that went from 66 days to 29 days under their new structure.

<sup>24</sup> General Schoomaker directed that trashcans would only be used as receptacles for lunch bags to reinforce both the importance of operational security (i.e. the use of "burn bags" for classified paper products) and the ethos of a "paperless" office. From interview with COL Steven J. Hoogland, USA, Director, USSOCOM Washington Office, 4 October 2000.

## Organizational Insights

USSOCOM learned several valuable lessons during their transformation. Initially there was some resistance both inside and outside of the command to accept the shift in organizational paradigm. The value of staff education and command structure “advertising” proved to be critically important. New staff members, a segment of the military population consistently requiring organizational training and education<sup>25</sup>, are currently indoctrinated in a program known as the “SOF Leader Information Course.”<sup>26</sup> This has gone far to ensure that the headquarters “speaks with one voice.” Additionally, there were some initial communications problems with SOCOM’s counterparts (who still use the “J” structure), but this has been overcome through aggressive publicizing of the updated staff structure.<sup>27</sup>

## Sustaining Change

USSOCOM has demonstrated its long-term commitment to sustaining the transformation they have accomplished. They have put great emphasis on the continuous monitoring, gauging, and adjusting of the course of their headquarters’ change by establishing an “Innovation and Improvement Directorate” (in SOCS). The Director, Innovation and Improvement, is the proponent for an organization called the “CINC’s

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<sup>25</sup> See Winfield, W. Montague, Maj, USA. *The Staff and Staff Officer Challenge*. MMS Thesis. Quantico, VA: Marine Corps Command and Staff College, 1990.

<sup>26</sup> This course is a 3-day event held at the USSOCOM HQ in Tampa, FL. All new staff members must attend and it is held every 2-3 months. This is an invaluable investment of time in order to ensure all staff members and leaders fully accept the command climate and philosophy embodied in the new staff organization and processes. From telephonic interview with COL Lee U. Hoffman, USA, Director, Innovation and Improvement, USSOCOM Staff, 3 November 2000.

<sup>27</sup> Taken from USSOCOM unclassified memo, 2. General Zinni noted the potential for this disconnect between organizations that transform and those left behind. He commented on this friction by observing, “. . . the people above and below you don’t connect [because] your phone books don’t match.” General Anthony C. Zinni, USMC (Ret.), CINC CENTCOM from 1997-2000, interview by author, 12 October 2000.

Transformation Action Group” (CTAG). The CTAG is comprised of senior members from throughout the CINC staff who closely monitor the path of staff innovation.<sup>28</sup>

The Innovation and Improvement Directorate continues to fuel the fire of transformation in the command by managing “reinvention” and “better idea” programs. Its focus on self-evaluation and refinement has gone far to perpetuate the ethos of reengineering. Staff processes continue to mature and be modified. One proposed new program is a “knowledge management plan” which determines where experts, in all variety of military disciplines, reside within the staff. These acknowledged authorities will be identified and organized in advance before issues needing their expertise arise.<sup>29</sup>

## **Conclusion**

USSOCOM has truly achieved a very distinct “sea change” in how a unified staff can be structured and organized to function. A recent shift of about 15 staff members from SORR to SOOP (because the SORR Director believed that these subordinates’ daily processes were focused primarily on “operations” issues) indicates a genuine change in the mindset of headquarters staff leaders.<sup>30</sup> The stress placed on manifesting an “Action Officer Mindset,”<sup>31</sup> by the SOCOM senior leadership, has empowered shared knowledge

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<sup>28</sup> Their mission statement is: “Constant evaluation of factors that drive organizational change.” From “Keeping the Ball Rolling: Sustaining the Gains of Organizational Change at U.S. Special Operations Command”, Slide 15.

<sup>29</sup> This will potentially speed the completion of key staff functions by negating the time consuming step of determining where knowledgeable staff members exist before starting to form working / planning groups. From telephonic interview with COL Lee U. Hoffman, USA, Director, Innovation and Improvement, USSOCOM Staff, 19 October 2000.

<sup>30</sup> Story related during interview with COL Steven J. Hoogland on 4 October, 2000.

<sup>31</sup> The “Action Officer” philosophy is meant to accomplish several important goals: keep coordination at the lowest level, put information where appropriate, establish matrixed team members who work for a leader (who may be a peer), providing staff members with the responsibility for getting their work completed, and allowing lower level staff members to aggressively pursue issues with autonomy while keeping their bosses informed. From telephonic interview with COL Lee U. Hoffman, USA, Director, Innovation and Improvement, USSOCOM Staff, 3 November 2000.

and collaborative coordination throughout the staff structure. Figure 6.9 reflects the resultant flattening of USSOCOM's headquarters structure.

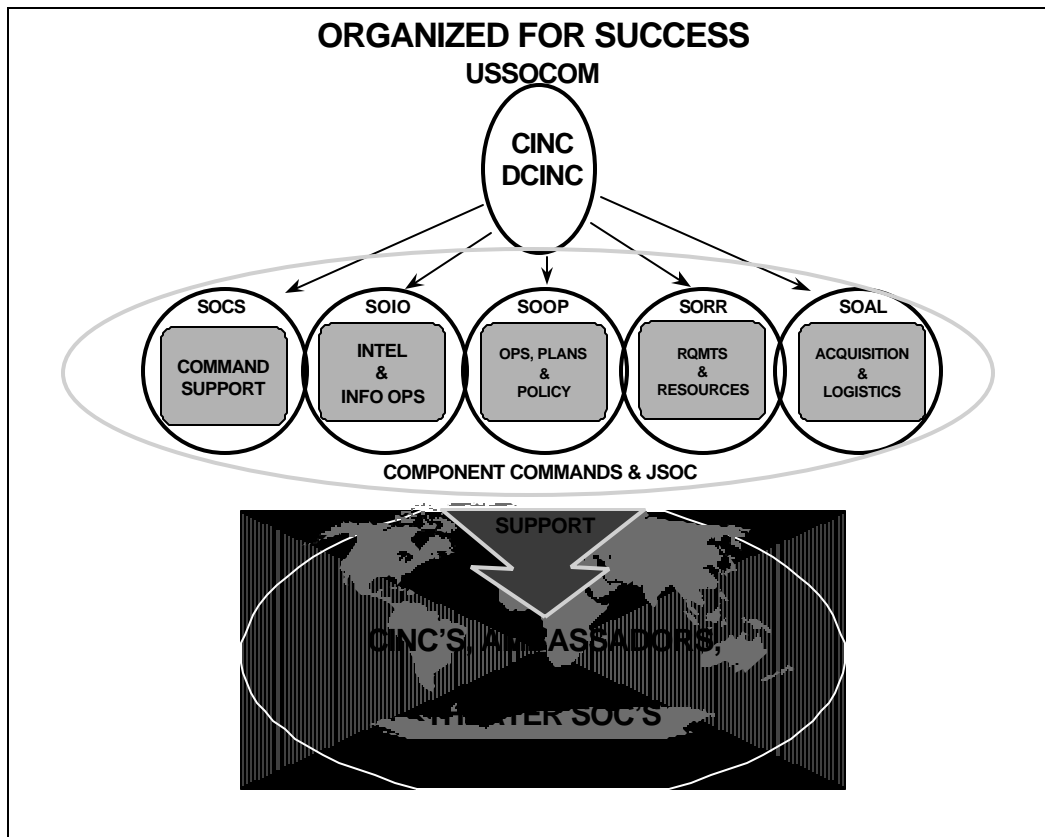


Figure 6.9<sup>32</sup>

USSOCOM appears successful in achieving their goals of “[getting] rid of excess and marginal staff functions . . . [while becoming] integrated with a greater distribution of leadership.”<sup>33</sup> Although SOCOM is a unique functional “CINC-dom,” other U.S. unified commands can follow their example for possessing a bias for staff transformation and refinement. USSOCOM has demonstrated that the “J” structured organization does not have to be the default for modern American operational staffs.

<sup>32</sup> “Keeping the Ball Rolling: Sustaining the Gains of Organizational Change at U.S. Special Operations Command”, Slide 12.

<sup>33</sup> From interview with COL Steven J. Hoogland, 4 October 2000.



## Chapter 7

### **THE FUTURE UNIFIED COMMAND STAFF: A Flattened / Cooperative Format**

*The challenge for the U.S. military is to develop new organizational structures that achieve the efficiencies and creativity businesses have gained in the virtual and reengineered environments, while at the same time retaining the elements of the traditional, hierarchical, command and control system (e.g. discipline, morale, tradition) essential for operations in the combat arena<sup>1</sup>.*

- Rand Corporation Study

*We don't pay enough attention to . . . the whole essence of making decisions on how staff is going to be structured, physically laid down on the ground, interact with each other, the processes / procedures they need to go through, the technical systems they'll need to support them---that needs to be structured in a way to be conducive to rapid, effective, relevant decision making.<sup>2</sup>*

- General A.C. Zinni, USMC (Ret.), Former CINC USCENTCOM

### **Overview**

Many adjustments have been made to the historical “4-Section” staff in the last 25 years. The rise to preeminence of the American CINC-doms in the mid-1980s ushered in a wide variety of staff structures that are currently used at the operational level of war. The uniqueness of each unified command (some functional, others geographic), combined with

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<sup>1</sup> Arthur F. Huber and others, *The Virtual Combat Air Staff: The Promise of Information Technologies* (Santa Monica, CA: Rand Corporation, 7 August 1996), xiii.

<sup>2</sup> General Anthony C. Zinni, USMC (Ret.), CINC CENTCOM from 1997-2000, interview by author, 12 October 2000.

the personalities of the CINCs, has made each headquarters somewhat different in appearance. However, the hierarchical, functional structures that Gustavus Adolphus first introduced to European warfare in the 17<sup>th</sup> Century still inhabit the CINC command posts of today.

Many organizational initiatives have been put to use in the contemporary business world. “Models include the hierarchy, the network, a horizontally flat structure with an extended span of control, a vertically integrated structure, and hybrids.”<sup>3</sup> American unified command staffs should examine the models currently being used both inside and outside today’s military community. Any new staff format will have to possess qualities that facilitate responsive, efficient, and timely staff actions that effectively support the CINCs’ desires.

## **Shape and Format**

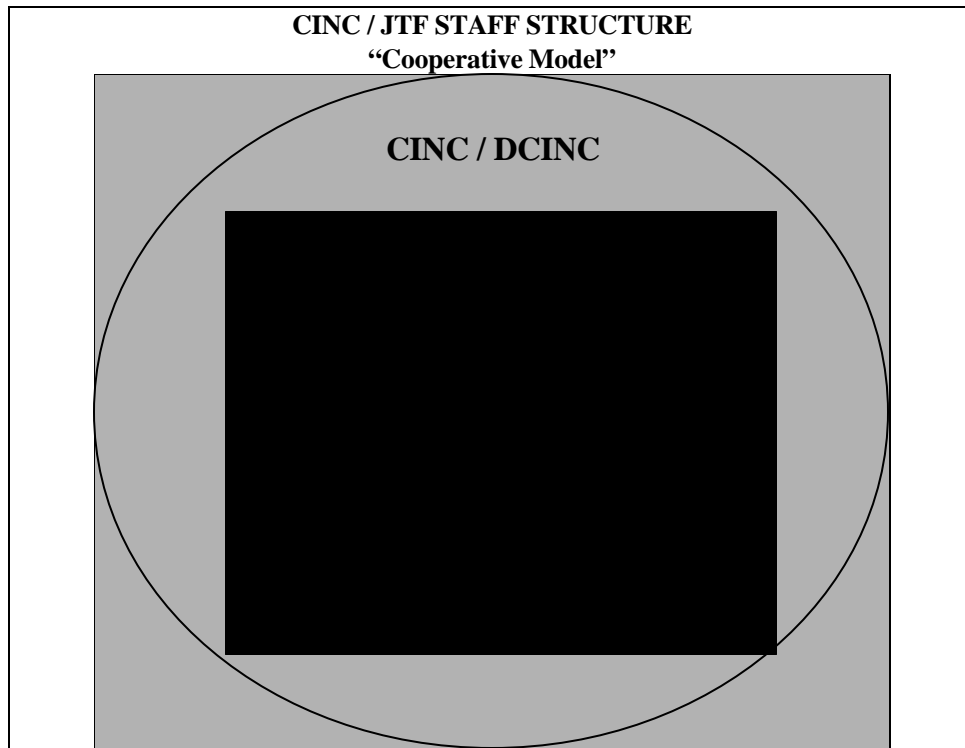
The overall shape of the proposed new staff model is circular<sup>4</sup>, with flat and wide reporting chains. It will conform generally to General Zinni’s recommendation to look like, “Concentric circles [that] are flat but spread laterally. Connected in cylinders.”<sup>5</sup> Figure 7.0 depicts how this new “cooperative” model might look. This format possesses very “permeable” boundaries between centers, meant to facilitate collaboration and shared awareness. The Directors of each Center report directly to the CINC / DCINC with no intermediary filter of their knowledge / recommendations. All members of the staff are in the same “information / knowledge” circle.

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<sup>3</sup> Huber and others, 44.

<sup>4</sup> A concentric model was first described in BGen Anthony C. Zinni, USMC, COL Jack W. Ellertson, USA, and Maj Bob Allardice, USAF, “Scrapping the Napoleonic Staff Model,” *Military Review*, July 1992, 83-87. In this article, the “Heretic” model was introduced by the authors. This format was arranged similar to a “bull’s eye” with the rings organized functionally. Planning time requirements were used as the critical determiner where staff boundaries were located. It depicted a “senior decision cell” in the center, a “battle staff” in the next ring out, a “support staff” in the next ring, and a “strategic issues” cell in the outer ring.

<sup>5</sup> Zinni interview.



**Figure 7.0**

Figure 7.1 depicts the transformation of the traditional CINC staff responsibilities to the new “cooperative” Centers. Some of the salient points of this reengineering are:

- There is no traditional “Chief-of-Staff” or “Secretary of Joint Staff.” Instead the Chief-of-Staff heads up the Headquarters Support Center and uses the Secretary to coordinate the CINC’s personnel and special staffs.
- A new position of C<sup>4</sup>ISR Officer is created. He is resident in the C<sup>4</sup>ISR Center, but not the Director. His duties are explained in depth later.
- Personnel and Logistics are combined in a “People & Things” Center.
- Special Operations becomes a separate staff section as well as a possible component commander.
- Operations, Future Ops., Plans and Policy are all contained in the same Center. They are separated horizontally (with collaborative borders) so that they can plan in different time frames.
- The C<sup>4</sup>ISR Center merges intelligence functions with information systems. As new technological tools are fielded, the separation between intelligence production and distribution must fade. This is an effort to ensure integration and rapid transmission of knowledge.

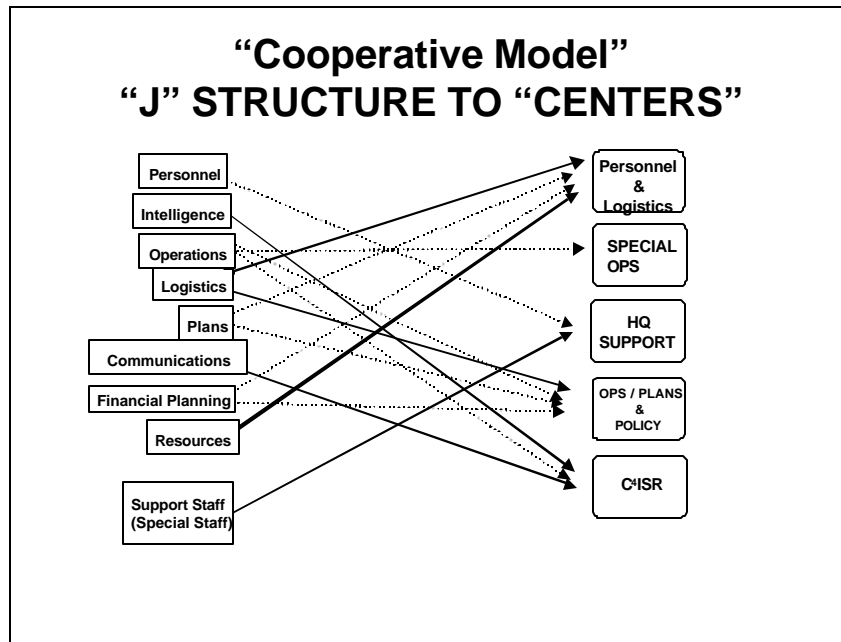


Figure 7.1

## Command-Control Expert

To effectively institute the MCP concept of adaptable organizational structure, a critically important new type of staff billet (I’ll call him the C<sup>4</sup>ISR Officer) will have to be created to orchestrate the creation of such transient headquarters structures. General Zinni described this officer as,

A “command-control” officer, [but] not technical; he would be a key member of staff.” He is an expert on processes, technology, etc. He recommends organization, systems, connectivity, processes, and what SOPs to use. C<sup>2</sup> plan must have COA’s. Not simply an information management officer. He’s like the “3” in a way. Might be a more powerful avenue to commandship than others.<sup>6</sup>

This individual, probably an O-6 (from any service), must have an established record as a capable commander as well as staff officer. He must understand not only what a commander needs from his staff, but he must intimately know the dynamics that occur in operational staffs.

<sup>6</sup> Zinni interview.

Ideally, the C<sup>4</sup>ISR Officer would have a “menu” of structure options for the commander to choose from or modify. This officer (and perhaps a small staff) would report directly to the unified commander, but would be resident in the C<sup>4</sup>ISR Center. He must stay closely in tune with the operational plans being developed and therefore will sit in on most Ops / Plans working groups. As General Zinni noted, this would be an officer who had been identified with a bright future ahead (i.e., it needs to be a career enhancing billet which is aggressively sought after by the “best and brightest”).

### **Harnessed Technology**

Fully integrated with new staff structure must be the wealth of technology that is currently being developed to assist organizational processes. This goes beyond communication and data processing equipment. CINC's will need to leverage those tools that contribute dramatically to situational awareness, collaboration, and rapid decision operations.

### **Situational Awareness**

The improved staff model will necessitate the sharing of unrestricted information across staff directorates and down to subordinate commands. A “relevant” C.O.P. will need to be fielded and in the hands of all planners and executors. This will be a “pull system” which allows each user to tailor their display's fidelity to acquire the level of information they need to conduct rapid decision cycles. The system must be secure and mobile to ensure that this portal does not tie members (especially commanders) down to fixed sites. The institution of such a pervasive system will allow staff members to perform duties as the CINC's “directed telescope” in cyberspace. They can aggressively search (“surf”) all available data, reports, and background information and determine what is most important for the commander to know in order to understand the situation.

## **Collaboration**

Collaboration initiatives must be emplaced in this new staff format. A collaboration suite<sup>7</sup> must be provided to each CINC that will allow seamless coordination between staff sections as well as component commands. This suite should include shared digital planning screens, voice / visual connectivity, and shared information databases. As important as structured communication / data architecture will be for collaboration, “. . . it is vital that [it]be supplemented by an informal one that acts, so to speak, as lubricating oil.”<sup>8</sup> Staff members have got to be given the autonomy to conduct collaboration at every level while operating under the general guidance of “commander’s intent.”

## **Rapid Decisive Operations**

Decisions can be categorized as being simple, dominant, or complex.<sup>9</sup> Simple decisions (those that are easily defined with fixed options) are the ones that can easily be accomplished through technological devices (i.e., automated decision aids).<sup>10</sup> Dominant and complex decisions can be supported by timely and valuable information delivery to decision makers. As discussed by Dr. Alberts, “Most commands will be automatically disseminated and incorporated in decision aids. Many decisions will be fully automated. Virtually all information will be distributed horizontally.”<sup>11</sup> This decision “streamlining,” linked with a philosophical bias for decisive closure on issues, can make staff actions more rapid and aid the building of tempo in the headquarters.

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<sup>7</sup> From discussion with Dr. Richard E. Hayes, Ph.D., President, Evidence Based Research, Inc., interview by author, 1 December 2000.

<sup>8</sup> Martin L. Van Creveld, *Command in War* (Cambridge, MA: Harvard University Press, 1985), 273.

<sup>9</sup> Hayes interview.

<sup>10</sup> Harry S. Dent, in *The Roaring 2000s* (New York: Simon & Schuster Inc., 1999), page 139, discusses that “Routine, repetitive, left-brain tasks are automated and assumed by sophisticated computer systems, which frees individuals at all levels of the organization to engage in more creative, right-brain customer-oriented work.”

## **Staff Member Training**

Investing time and assets into training new members of a transformed staff organization will be critically important. Because this structure will be new to all members, they will have to be indoctrinated in its physical layout, and more importantly in the ethos that it embodies. The program currently used at USSOCOM is a good model of an effective program that could be used. All members of a unified staff (up to and including the CINC) must attend this as a priority after they join the command.

## **Conclusion**

This new format, and the associated staff improvement measures addressed in this Chapter, can increase the collaboration, situational awareness and decision making of our military staffs. This model will only provide the framework for better staff operations.<sup>12</sup> Empowerment and situational awareness will be the fuels that the engine of new staff organization will burn.

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<sup>11</sup> David S. Alberts, *The Unintended Consequences of Information Age Technologies: Avoiding the Pitfalls, Seizing the Initiative* (Washington, DC: GPO, April 1996), 23.

<sup>12</sup> The J-7/J-8 of the Joint Staff have been exploring the “Joint Strike Force Operational Concept” in order to overcome the current deficiencies associated with establishing “come as you are” JTFs by the geographic CINCs. This future organization quickly stands up and is capable of conducting “rapid decisive” and “effects based” operations within the framework of “Net Centric Warfare.” It employs a staff structure that is non-hierarchical, collaborative, and adaptive. The model proposed in this chapter is suitable for use as the staff format within the Joint Strike Force.

## Chapter 8

### CONCLUSION

*We cannot achieve battle . . . Nirvana merely by putting more computers and communicators into the command posts, nor by linking all existing and future computers into a local, regional, or even a global “grid” . . . we . . . need to know how to design the perfect organization, one which is completely adaptable . . . we need to know enough about how people process information to be able to design the necessary tools and systems to avoid errors and the loss of time when dealing with information . . . we need to know enough about how people work together to make sure that the organizational design, procedures development, training development, and systems design provide products which are optimized for the most effective performance by the commander and staff as a whole<sup>1</sup>.*

- From the U.S. Army Research Institute for the Behavior and Social Sciences

### The Problem Redefined

In the future, the military staffs of the American unified commands (CINC / JTF) will be required to operate with compressed decision / action cycles in order to maintain operational dominance. This will necessitate the achievement of initiative across the spectrum of peace and war. To gain and maintain initiative, a military organization must manage the tempo of operations. General Zinni, former CINC USSOCOM, expressed his belief that, “to control tempo, you need to make rapid, relevant decisions . . .”<sup>2</sup> The current hierarchical, stove-piped staff structure in use by the CINCs does not support rapid

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<sup>1</sup> Stanley M. Halpin, *The Human Dimensions of Battle Command: A Behavioral Science Perspective on the Art of Battle Command* (Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences, June 1996), 37.

<sup>2</sup> General Anthony C. Zinni, USMC (Ret.), CINC CENTCOM from 1997-2000, interview by author, 12 October 2000.



and responsive staff decisions. In order to remedy this deficiency, the U.S. DoD will need to facilitate staff structure transformation at the operational level of war.

## **Cultural Resistance to Change**

Senior military leaders understand the need for structural update. A barrier to change exists because of service and functional specialization.<sup>3</sup> Mid grade officers must be educated concerning emergent organizational concepts. They must be shown structural alternatives to the traditional formats. Most importantly, they must be empowered to experiment (while assigned to joint staffs) with different structural innovations in order to discover which models are most effective. It will take time and effort to shift organizational paradigms.<sup>4</sup>

## **Organizational Doctrine**

Service and component doctrine must be lined up with joint doctrine for change to be institutionalized.<sup>5</sup> Without changes in doctrinal organizational models, the “nay sayers” of headquarters staff restructuring will never be compelled to change. The establishment of Joint Forces Command (JFCOM), and their mission of joint experimentation and doctrine validation, makes them a perfect candidate to be the proponent for staff restructuring. Their J-9 Directorate (“Joint Experimentation”) should take the lead in pursuing staff structural innovation. Standardization of organizational structure is not the desired end state. Instead, the unified commands should be encouraged to institutionalize a bias to find the most efficient manner in which to arrange themselves (similar to what USSOCOM did in 1997).

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<sup>3</sup> From discussion with Dr. Richard E. Hayes, Ph.D., President, Evidence Based Research, Inc., interview by author, 1 December 2000. It was discussed that most senior leaders aggressively are pursuing the newest and greatest technology and organizational concepts. However, they are very concerned about the associated costs in transforming.

<sup>4</sup> “Changing the Napoleonic staff is like changing the size of the infantry rifle squad.” Remark from Zinni interview.

## Need for CINC Centers of Innovation

USSOCOM's establishment of an "Innovation and Improvement Directorate" has shown the other unified command staffs the manner in which to dedicate an organization to transformation. Dr. Alberts pointed out the need for such command endorsement by stating, "Success requires innovative ideas. It is recommended that leaders across the board encourage the development and strengthening of centers of innovation within their organizations."<sup>6</sup>

## Final Thoughts

Organizational change is extremely difficult to accomplish. General Zinni commented on this challenge:

Few people understand it, and it's fairly complex bringing all these things together: technical, organizational, procedural. Emphasis is always on technology but not what goes with it—people are always pushing for better systems but same structure.<sup>7</sup>

Current American military staff structure, employed at the operational level of war, does not support the commander in the most efficient manner. Modern unified commands should adopt a more horizontal staff organization that is adaptive, collaborative, self-synchronizing, responsive, and agile. The U.S. CINCs must have the most capable staffs in the world if they are to effectively direct modern, complex military operations. Only by reengineering the current format can we hope to fully exploit the wave of military technologies that we have yet only begun to experience.

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<sup>5</sup> From Hayes interview.

<sup>6</sup> David S. Alberts, *The Unintended Consequences of Information Age Technologies: Avoiding the Pitfalls, Seizing the Initiative* (Washington, DC: GPO, April 1996), 14.

<sup>7</sup> From Zinni interview.

## *Glossary*

AEF	American Expeditionary Force (WW I)
AOR	Area of Responsibility
C <sup>2</sup>	Command and Control
CENTCOM	Central Command
CEO	Chief Executive Officer
CINC	Commander in Chief (Unified Command)
C <sup>4</sup> ISR	Command, Control, Communications, Computers, Integration, Surveillance, and Reconnaissance
COP	Common Operating Picture
COS	Chief-of-Staff
CTAG	CINC's Transformation Action Group
DCINC	Deputy Commander in Chief (Unified Command)
DoD	Department of Defense
EUCOM	European Command
JCS	Joint Chiefs of Staff
JFCOM	Joint Force Command
JTF	Joint Task Force (Sub-Unified Command)
LMI	Logistics Management Institute
MCP	Mission Capability Package
OPT	Operational Planning Team
OPG	Operational Planning Group
PACOM	Pacific Command
RATs	Reengineering Action Teams
SOAL	Special Operations Acquisition and Logistics
SOC	Special Operations Command
SOCS	Special Operations Command Support
SOF	Special Operations Forces
SOIO	Special Operations Intelligence and Information Operations
SOOP	Special Operations Operations, Plans, and Policy
SORR	Special Operations Requirements and Resources
SOUTHCOM	Southern Command
USA	United States Army
USAF	United States Air Force
USMC	United States Marine Corps
USN	United States Navy
USSOCOM	United States Special Operations Command

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